Australian Government
Department of Health

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NEPEAN
BLUE MOUNTAINS
An Australian Government Initiative

Wentworth Healthcare
Blue Mountains | Hawkesbury | Lithgow | Penrith

Nepean Blue Mountains Primary Health Network

Mental Health and Suicide Prevention Needs Assessment

November 2017

Section 1 – Narrative

The approach taken for this updated version of the November 2017 Mental Health and Suicide Prevention Needs Assessment has accepted the value of previous research conducted by the former Nepean-Blue Mountains Medicare Local (NBMML) concerning local health needs. The NBMPHN has maintained the same boundaries as the NBMML, which had been an amalgamation of several GP Divisions.

The processes followed for the initial needs assessment have been:

- Review of previous needs assessment studies and formal stakeholder consultations undertaken as Medicare Local and General Practice Networks/Divisions, in 2012, 2013, 2013/2014 and 2014/2015.
- Identified consistent themes arising from previous assessments consistent with National mental health priorities for Primary Health Networks (PHNs).
- Undertaken new research and consultation activities to expand information supporting demographic profiles and the mandated 6 mental health priority themes
- Established baseline health service needs to inform Annual Planning and planned commissioning of services.

The key previous needs assessment reports, undertaken as the NBM Medicare Local are listed below:

- A Report on the Health Needs of the Nepean Blue Mountains Medicare Local Area". Undertaken by JustHealth Consulting in partnership with The Menzies Centre for Health Policy, August 2012.
- "Whole of Area Needs Assessment Update for the Nepean Blue Mountains Medicare Local Area". JustHealth Consulting, April 2013.
- "Comprehensive Needs Assessment". Nepean Blue Mountains Medical Local, 2014/2015.
- Individual Community Reports on the Lithgow, Blue Mountains, Nepean and Hawkesbury Community Forums on Health conducted by the Inerim Joint Health Consumer Committee of the Nepean-Blue Mountains Medicare Local and Nepean Blue Mountains Local Health District, published June 2013.
- Individual Aboriginal Sharing and Learning Circle Reports Lithgow, Blue Mountains. Penrith and Hawkesbury jointly conducted by Nepean-Blue Mountains Medicare Local and Nepean Blue Mountains Local Health District, published May 2015.

This updated comprehensive version of the Mental Health and Suicide Prevention has built on the initial assessment by adding additional health need and service need data, updating some of the existing data and through additional select and targeted stakeholder consultation in particular in regard to changes to the existing Access to Allied Psychological Services (ATAPS) program.

Most of the initially identified opportunities, options and priorities are still relevant and have been left in place.

Service needs assessment has been primarily qualitative. Further comprehensive service mapping will be required to be undertaken in order to analyse and validate the service needs

that have been identified here through qualitative methods. It is expected that the Regional Mental Health and Suicide Prevention Plan will progress these tasks.

Wentworth Healthcare has a strong commitment to mental health consumers and carers. To ensure an ongoing consumer and carer voice the previous PIR Consumer and Carer Regional Development Teams are being transformed and expanded into an NBMPHN Consumer and Carer Advisory Committee able to address all levels of the stepped care model.

Aboriginal Community members have indicated that further broad community consultation is not desirable as the needs of the community have been stated in previous consultations. Taking this into account NBMPHN has, together with NBMLHD, set up a joint regional Aboriginal Advisory Committee for Drug & Alcohol and Mental Health which includes community representation from each of the four LGAs in the region.

The priority needs identified remain the same in this updated needs assessment and support the themes identified in the initial needs assessment. A summary of themes and high level needs identified for primary care in the NBM region are listed below:

Suicide prevention	High rates suicide middle aged and elderly men. Increasing rates of suicide among youth. High suicide rates for Indigenous Australians. Lack of data for CALD populations. Variation in rates of suicide across the region. High rates Penrith, Springwood-Winmalee, and Lithgow. Rick factors include: - Remoteness of residence - Socioeconomic disadvantage - Mental illness - Drug and alcohol abuse - Previous suicide attempt or family history - LGBTI populations - Following change in treatment High levels of admissions for self-harm. Lack of assertive after care when people are discharged from hospital after a suicide attempt.
Mental health	Prevalence of mental disorders among adults. High rates of mental disorder hospitalisations. Significant increase in report high levels of psychological distress among people 16 years and older. High proportion Aboriginal people experience psychological distress. Relatively low proportion of Aboriginal people access psychological and psychiatric services. High proportion of Aboriginal people hospitalised for mental health disorders. Lack of culturally safe mental health services for Aboriginal communities. Inadequate psychiatric services across the region. Lack of appropriate psychological therapy support for people with moderate to severe mental illness with added complexity (trauma/PTSD) Lack of coordinated aftercare when people are discharged from hospital. Need for mental health peer support.

Detailed service mapping to establish baselines for regional planning in Mental Health. Mapping will involve geo-spatial illustration of key indicators relevant to demand for services such as socioeconomic and behavioural factors.

Additional resources on the PHN website to support future needs assessment may include visualisation and extraction tools such as QlickView, and data sets that can be drilled down to regional level. For example, analysis of Australian refined diagnosis-related groups (AR-DRG) at the regional level would facilitate targeting of primary care services in relation to headline indicators such as potentially preventable hospitalisations.

It is also suggested that the date for submission of future needs assessments be reassessed to allow a greater time period between identification of needs and the development of solutions. This would support more timely consultation with key stakeholders.

Section 2 – Outcomes of the health needs analysis

SUICIDE PREVENTION

Outcomes of the health needs analysis – Priority Theme: *Suicide Prevention*		
Identified Need	Key Issue	Description of Evidence
Suicide Rates	Death by intentional self-harm has increased.	In 2015 the suicide rate was 3027 deaths by suicide in Australia (all ages) which equates to 8.3 suicides a day. Overall suicide rates in NSW have increased over the 2006 to 2015 period from 8.4 to 10.6 standardised per 100,000 (national rate 12.6). In 2015 suicide was the leading cause of death for people aged 15-44 and for people aged 45-54 it was the second leading cause. Nationally, the highest proportion of suicide occur in males aged 40-44 and in females aged 45-49. *Australian Bureau of Statistics. (2016). Causes of Death, Australia, 2015. ABS Cat. No. 3303.0. Canberra, ACT: Australia.* There were 46 deaths from suicide in the Nepean Blue Mountains (NBM) region in 2015. Suicide rates per 100,000 in the NBM PHN region have been above the NSW average with some fluctuation between 2001 and 2015. While the overall trend was downwards for the period 2001 to 2013, from 15.5 per 100,000 (NBM PHN) vs 12.1 (NSW) in 2001 to 9.3 per 100,000 (NBM PHN) vs 9.1 (NSW) in 2013, suicide rates in the NBM PHN region increased

		again in 2014 and 2015 and were higher relative to NSW. Suicide rates in NBM in 2014 were 14.3 per 100,000 (10.2 in NSW) and in 2015 were 12.9 per 100,000 (10.6 in NSW). *Health Statistics NSW online portal – Suicide, Nepean Blue Mountains PHN, NSW 2001 to 2015.*
	Growing economic cost of death by suicide	The associated economic loss in Australia from death by suicide is proportionally higher compared to those who die from ischemic heart disease. Death by suicide, where the median age is 43 years, results in significantly higher amounts of days (years) lost from the remaining lives of the affected persons. *Australian Bureau of Statistics. (2016). Causes of Death, Australia, 2016. ABS Cat. No. 3303.0. Canberra, ACT: Australia.*
Males	Higher suicide rates for men.	Death from intentional self-harm is higher for males than females. In 2015 the standardised suicide rate for males was 19.3 death per 100,000 compared to 6.1 death per 100,000 for females. This is 3.2 times the age standardised rate for women. *Australian Bureau of Statistics. (2016). Causes of Death, Australia, 2015. ABS Cat. No. 3303.0. Canberra, ACT: Australia.* Men are at greater risk of death by suicide accounting for over three quarters of fatalities (76%). An estimated 72% of males will also not seek help for mental health disorders. *https://www.blackdoginstitute.org.au/docs/default-source/factsheets/facts_figures.pdf?sfvrsn=8* Men who have previously attempted suicide are an especially high-risk group for subsequently completing suicide. *J Mendoza & S Rosenberg, Suicide and suicide prevention in Australia: Breaking the silence, Lifeline Australia & Suicide Prevention Australia, Sydney, 2010.*

Youth	Increasing rates of suicide attempts among young people	The "Young Minds Matter" survey (2013–14) showed that 7.5% of 12 to 17 year-olds had seriously considered attempting suicide in the previous 12 months, 2.4% reported having attempted suicide in the previous 12 months, and 0.6% received medical treatment as a result of their injuries. Suicidal behaviour was more common in females than males, and in 16-17 year-olds compared with younger adolescents. 15.4% of females aged 16-17 years had seriously considered attempting suicide and 4.7% had attempted suicide in the previous 12 months. 56.4% of females aged 12-17 years with major depressive disorder (based on self-report) had seriously considered suicide and 22.1% had attempted suicide in the previous 12 months. In comparison 13.8% of males aged 12-17 years with major depressive disorder (based on self-report) had attempted suicide in the previous 12 months. *Lawrence D, Johnson S, Hafekost J, Boterhoven De Haan K, Sawyer M, Ainley J, Zubrick SR (2015) The Mental Health of Children and Adolescents. Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing. Department of Health, Canberra*
	Prevalence of self-harm in young people in the NBMPHN region	There was a faster increase in self-harm hospitalisation rates in NBM region population from 2001/02 to 2014/15: • In the 15-24 years age group across the region, female self-harm hospitalisation rates increased by 3.31% per year compared with a 1.95% increase per year in NSW females. Male rates increased by 3.66% per year compared with an increase of 0.27% per year in NSW males. • In the population aged 15-24 years in 2014/15 in the NBM region, the female rate of hospitalisation for self-harm (417 hospitalisations per 100,000 population) was double that of NBMLHD males (205). Further, in the NBMPHN region for 2017 the estimated prevalence of self-harm for young people aged 12-17 years has been calculated at: • 10.9% (3,333 adolescents) have self-harmed. • 5.9% (1,809 adolescents) have self-harmed more than 4 times.

		• 8% (2,457 adolescents) self-harmed in the previous 12 months. • 0.8% (241 adolescents) received medical treatment for self-harm in previous 12 months. • Female rates of self-harm ever were twice that of males. • Female rates of self-harm in the last 12 months were 3 times that of males. *Mental Health of Nepean Blue Mountains Local Health District Population 2017*
	Increasing rates of suicide among young people	In 2015, suicide accounted for 33.9% of all death in young people aged 15-24. In 2015 approximately 8 children and young people (aged 5-24) died by suicide per week in Australia - an increase of 32% since 2006. *Australian Bureau of Statistics. (2016). Causes of Death, Australia, 2015. ABS Cat. No. 3303.0. Canberra, ACT: Australia.*
	Young people identifying as LGBTIQ	According to the 2013 Young and Well Corporate Research study, 16% of young people identifying as lesbian, gay, bisexual, transgender, intersex or queer have attempted suicide and 33% have self-harmed. *Robinson, KH et all, 2013. Growing Up Queer: Issues Facing Young Australians Who Are Gender Variant or Sexually Diverse.* Nationally, LGBTI people experience a rate of suicide over four times higher than the population as a whole. *https://www.blackdoginstitute.org.au/docs/default-source/factsheets/facts_figures.pdf?sfvrsn=8*
Aboriginal & Torres Strait Islander People	High suicide rates for Aboriginal and Torres Strait Islander people	Aboriginal and Torres Strait Islander people experience an overall rate of suicide more than double that of non-Indigenous Australians. *https://www.blackdoginstitute.org.au/docs/default-source/factsheets/facts_figures.pdf?sfvrsn=8*

		National suicide rates for Indigenous Australians are high (2.25 times age standardised, 2001-2010), with rates in NSW only 1.4 times age standardised for the same period. The largest difference between Indigenous and non-Indigenous rates are at younger ages, with the age-standardised rate 4 times higher for 25-29 year old males and more than 5 times higher for 20-24 year old females. *Australian Bureau of Statistics. (2012). Suicides, Australia, 2010. ABS Cat. No. 3309.0. Canberra, ACT: Australia.* In NSW, young Indigenous Australians (aged 14-24) continue to have higher rates of suicide than adult Indigenous Australians (aged over 24 years old), with 13.2 vs 12.0 deaths per 100,000 respectively in 2010-2014 and 15.3 and 13.8 respectively in 2011-2015. This is significantly higher than the equivalent age groups of non-Indigenous Australians during the same period, with 7.5 and 9.3 deaths per 100,000 respectively in 2001-2014 and 8.1 and 9.6 respectively in 2011-2015. *Health Statistics New South Wales 2016* *http://www.healthstats.nsw.gov.au/Indicator/men_suidth/men_suidth_atsi_age*
	Aboriginal and Torres Strait Islander suicide rates are larger than the general population.	Rates of Aboriginal and Torres Strait Islander people suicide can be derived from ABS figures for NSW for the period 2001-2010. Based on the NSW figures, the Aboriginal and Torres Strait Islander people suicide rate at a state-level was 12.4 per 100,000 compared to 8.9 per 100,000 in the general NSW population. *Australian Bureau of Statistics, Estimated Aboriginal and Torres Strait Islander Resident Population by LGA, 2011.* *Department of Health, Aboriginal and Torres Strait Islander suicide: origins, trends and incidence, Canberra, 2013.*
CALD Communities	Lack of data.	Culture and ethnicity is not captured in ABS data.

		Australian Bureau of Statistics. (2012). Suicides, Australia, 2010. ABS Cat. No. 3309.0. Canberra, ACT: Australia. National statistics indicate lower suicide rates amongst migrants from Africa, the Middle East and Asia (about half, age standardised) but rates are comparable with the whole population for other migrant groups. Data on suicide behaviour amongst migrant communities in the NBM region is not collected and it is not known whether particular CALD communities face higher than average suicide risk. *NBMPHN Suicide Prevention Stakeholder Consultation 24/2/16.*
CALD Communities		Taboos around suicide indicate that suicide rates amongst CALD populations may be lower than general population rates. *Stakeholder Consultation with Nepean Multicultural Access, October 2016*
CALD Communities	Syrian refugee intake commencing in March 2016.	Syrian refugees will be resettled in Colyton, originally commencing from March 2016, but with timing unknown. This group may be at increased risk of suicide due to post-traumatic stress disorder, bereavement, physical illness, other mental health issues and social dislocation. *NBMPHN Suicide Prevention Stakeholder Consultation 24/2/16.*
Location	Remoteness of residence may be a risk factor for people living in outlying SA2s.	National age-standardised suicide rates increase with the remoteness of the person's place of residence. *AIHW: Harrison JE & Henley G 2014. Suicide and hospitalised self-harm in Australia: trends and analysis. Injury research and statistics series no. 93. Cat. no. INJCAT 169. Canberra: AIHW.* *SAPHaRI, Centre for Epidemiology and Evidence, NSW Ministry of Health 2013, obtained from http://www.healthstats.nsw.gov.au/*

Location	The number and rate of suicide is notably higher in some NBM region SA2s.	Based on a 10-year sample the highest number of suicides have been in the Lower Blue Mountains (Blaxland to Winmalee), St Marys–Colyton, Cambridge Park, Glenmore Park–Regentville, and Penrith. The highest suicide rates have been in Penrith and Springwood–Winmalee. *Region specific data provided by LifeLine (unpublished data from ABS 3303.0 Causes of Death, 2013). Numbers and rates are aggregated for 2004 – 2013*
Location	The number of suicide related hospital admissions and death is high in Penrith	Information provided by the Black Dog Institute identified 25 LGAs in NSW with a high hospitalization rates for suicide related morbidity and high mortality rate during the 2005-2013 period. Penrith LGA has been identified as one of these LGA with the following rates: • suicide related hospital admission rate is 1,725 per 100,000 - 11th out of 25 LGAs • mortality rate is 82 per 100,000 – 18th out of 25 LGAs *Black Dog Institute 2016. The systems approach to suicide prevention: site selection information*
Socioeconomic Disadvantage	Socioeconomic disadvantage may be a suicide risk factor in the NBM region.	National age-standardised suicide rates increase with socioeconomic disadvantage (particularly for males, less markedly for females). *AIHW: Harrison JE & Henley G 2014. Suicide and hospitalised self-harm in Australia: trends and analysis. Injury research and statistics series no. 93. Cat. no. INJCAT 169. Canberra: AIHW.* There appears to be a correlation between suicides rates and economic index in the NBM region (e.g. Penrith & Colyton) however this is not uniform across the region. *Region specific data provided by LifeLine (unpublished data from ABS 3303.0 Causes of Death, 2013). Numbers and rates are aggregated for 2004 – 2013*
Risk Factors: Mental Illness Drug & Alcohol	People with mental illness and/or D&A addictions are much more likely to commit suicide, attempt	Suicide is the main cause of premature death among people with a mental illness. More than 10% of people with a mental illness die by suicide within the first 10 years of diagnosis.

	suicide or experience suicidal ideation. Rates vary according to type of illness / addiction.	*SANE Australia, 2008. Factsheet: Suicidal behaviour and self-harm.* People with alcohol or drug abuse problems have a higher risk of suicide than the general population. *Department of Health and Ageing, (2007) Living is for Everyone: Life Framework, Canberra* Based on ABS national survey results, 72% of people experiencing suicidal ideation had a mental illness at the time. *Australian Bureau of Statistics. National Survey of Mental Health and Wellbeing: Summary of Results (Cat. No. 4326.0). Canberra: Australian Bureau of Statistics, 2008* Suicide attempts are highest for substance use disorders (3.1% of those affected), followed by affective and anxiety disorders (2.1% each). Suicidal ideation is highest for affective disorders (16.8%), followed by substance use disorders (10.8%) and anxiety disorders (8.9%). The comparative rate for no mental disorder is 0.8%. *Beyond Blue, Intentional self-harm and suicidal behaviour in children, submission to the Australian Human Rights Commission, 2014*
Risk Factors: **Prior Suicide Attempt** **Family History**	Individuals who have previously attempted suicide, have a family history of suicide or are bereaved by a suicide have a higher risk of attempting or completing suicide themselves.	People who have previously attempted suicide have a very high risk of attempting or completing another suicide event. *J Mendoza & S Rosenberg, Suicide and suicide prevention in Australia: Breaking the silence, Lifeline Australia & Suicide Prevention Australia, Sydney, 2010* *Connor, K. R., Langley, J., Tomaszewski, K. J., & Conwell, Y. (2003). Injury hospitalization and risks for subsequent self-injury and suicide: A national study from New Zealand. American Journal of Public Health, 93(7), 1128-1131* As many as 42% of child and youth suicides may be due to exposure to another person's suicide.

		State of Queensland, Commissioner for Children and Young People and Child Guardian, Final Report: Reducing Youth Suicide in Queensland, Commissioner for Children and Young People and Child Guardian, Brisbane, 2011
LGBTI people	High rates of suicide attempts for LGBTI people	There is currently no population-based data on deaths by suicide amongst LGBTI people in Australia. Research indicates that mental ill-health, self-harm, suicide attempt and suicidal ideation rates amongst LGBTI people are significantly higher than the general population. *Rosenstreich, G. (2013) LGBTI People Mental Health and Suicide. Revised 2nd Edition. National LGBTI Health Alliance. Sydney* LGBTI people aged 16 years and over are between 5-18 times more likely to have thoughts of suicide than the general population. Current research indicates that 3.4% of people in the Australian population identify as lesbian or gay, about 1% identify as bisexual, 0.3% are transgender and 1.7% are intersex. Applying these proportions to the NBMPHN population indicates that around 23,537 people in the PHN catchment area currently identify as LGBTI. Using the 2016 ERP proportions, the distribution of LGBTI people across the LGAs is therefore: • Blue Mountains: 5,037 • Hawkesbury: 4,233 • Lithgow: 1,377 • Penrith: 12,890 *National LGBTI Health Alliance, LGBTI People: Mental Health and Suicide, Newtown, 2013* *Australian Bureau of Statistics, Estimated Resident Population by LGA, 2016* *Roy Morgan Research. (2015). http://www.roymorgan.com/findings/6263-exactly-how-many-australians-are-gay-december-2014-201506020136*

		https://oii.org.au/16601/intersex-numbers/ *https://williamsinstitute.law.ucla.edu/wp-content/uploads/Gates-How-Many-People-LGBT-Apr-2011.pdf*
Hospital Discharge / Continuity of Care	Higher risk of suicide following a change in treatment.	There is a higher risk of suicide after discharge from hospital or when treatment has been reduced. *Martin, G., Swannell, S., Harrison, J., Hazell, P., & Taylor, A. (2010). The Australian National Epidemiological Study of Self-Injury (ANESSI). Brisbane, QLD: Centre for Suicide Prevention Studies.* *NBMPHN Suicide Prevention Stakeholder Consultation 24/2/16* A UK study identified that 43% of suicide deaths occurred within a month of discharge, and 47% of those occurring before a first follow-up appointment. The first day and first week after discharge were particularly high-risk periods. *Hunt, I.M., et al., Suicide in recently discharged psychiatric patients: a case-control study. Psychological Medicine, 2009. 39(03): p. 443-449*
Hospital Admissions	Higher self-harm hospitalisation rates in Penrith and Lithgow	In 2013/15, self-harm hospitalisation rates in the NBMPHN region compared with NSW rates were: • Significantly higher in Penrith LGA males (105.6 hospitalisations per 100,000 population) and Penrith LGA females (189.2) than NSW males and females • Significantly higher in Lithgow LGA males (157.5 hospitalisations per 100,000 population) and Lithgow LGA females (286.5) than NSW males and females. In 2013/15, out of 82 urban LGAs in NSW Lithgow has the least favourable ranking for self-harm hospitalisation rates for both males (ranking 68) and females (ranking 69) which are both in the least favourable 25%.

		During the same time period Penrith LGA ranked 47 (males) and 45 (females) and Blue Mountains ranked 42 (males and females) which puts them in the least favourable 26%-50%. Only Hawkesbury has a mixed ranking with 43 (males) and 26 (females) which puts it in the least favourable 26%-50% for males and in the most favourable 26% to 50% for females. *Mental Health of Nepean Blue Mountains Local Health District Population 2017*
	There is significant number of self-harm hospitalisations in the NBMPHN region; especially for females relative to national rates.	In 2011/12, the NBMLHD population experienced 601 hospitalisations for intentional self-harm (240 male and 361 female). Of these, 30% were in the 15 to 24 years age group (60 male and 112 female). This represented the highest hospitalisation rate for males and 2nd highest for females aged 15-24 compared with all other NSW metropolitan LHDs. The self-harm hospitalisation rates for all ages counted together were also significantly higher for males and females compared with NSW-wide rates. Across all ages, this lead to a rate of 130 hospitalisations per 100,000 males, and 200 hospitalisations per 100,000 females. These rates are significantly larger than the 2011-12 Australian rates as identified by the AIHW. The Australian rate of self-harm hospitalisation was 90 per 100,000 for males and 120 per 100,000 for females. *NBMLHD Epidemiological Profile: Mental Ill Health, 2014* *AIHW, Suicide and hospitalised self-harm in Australia, Canberra, 2014*
Method and Means	Large number of suicides by hanging.	A model of suicide 'means' developed using AIHW data and incorporating NSW data indicates that around 20 individuals commit suicide per year in the NBMPHN, based on 2010-11 rates. Using the 2016 ERP proportions based on the AIHW model, the number of suicides by means of death across the NBMPHN would be: • Hanging: 13 • Firearms: 1 • Poisons (except gas): 4 • Gas: 2

		This data can inform the focus of suicide prevention activities relating to means. *AIHW, Suicide and hospitalised self-harm in Australia, Canberra, 2014* *Australian Bureau of Statistics, Estimated Resident Population by LGA, 2016*

MENTAL HEALTH

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
Identified Need	Key Issue	Description of Evidence
Population Data	Size of population in NBMPHN region	2017 Estimated Resident Population (ERP) data for NBMPHN: Blue Mountains LGA 82,063 Hawkesbury LGA 68,131 Lithgow LGA 21,061 Penrith LGA 206,806 Total 378,061 *Estimated Resident Population by PHN and LGA, Australian Bureau of Statistics, 2017*

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
Prevalence Of Mental Health Disorders	Prevalence of mental disorders amongst adults.	The 2007 National Survey of Mental Health and Wellbeing (NSMHWB) estimated that 45% of Australians aged 16 to 85 experienced a mental disorder during their lifetime, and that an estimated 20% had experienced a common mental disorder in the previous 12 months. Anxiety disorders were the most common conditions reported for the 12-month period (14% of the population), followed by affective disorders such as depression (6%) and substance use disorders (5%). These three disorder groups were most prevalent in people aged 16 to 24 and decreased as age increased. Women experienced higher rates of anxiety disorders than men (18% and 11% respectively) and higher rates of affective disorders (7% and 5% respectively), but lower rates of substance use disorders (3% compared with 7%). *Australian Institute of Health and Welfare 2015. Mental health services—in brief 2015. Cat. no. HSE 169 Canberra: AIHW* Prevalence data from the NSMHWB for the 16 to 85 age groups applied to the estimated resident population in the NBM region in 2017 provides the following estimates for the prevalence of mental disorders amongst adults in the NBM region: • 45% (130,618 people) will have a mental health disorder at some point in their life • In the previous 12 months, 20% (58,052) had a mental health disorder, 14.4% (41,798 people) had an anxiety disorder, 6.2% (17,996 people) had an affective disorder, and 5.1% had a substance use disorder (14,803 people).

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
	Levels of psychological distress has significantly increased in the NBM region from 2013 - 2015	In 2015, 14.8% of the NBMLHD population aged over 16 years reported *high* or *very high* psychological distress. This was significantly higher than the NSW rate of 11.8% and higher than previous recordings for the NBM region (9.7% in 2013). In 2013 the corresponding figure for NSW was similarly lower at 9.8% indicating that psychological distress has risen to a greater extent in the NBM region within the last two years. Across all NSW PHNs, NBMPHN ranked second highest for persons with *high* or *very high* psychological distress. In NSW in 2015, the rates of reported high or very high psychological distress are higher for females (13.6%) than males (10.0%). The highest female rates are for 16-24 year olds (21.6%) and 55-64 year olds (14.9%). *High or very high psychological distress in persons over 16 years, by LHD, HealthStats NSW, 2017* *NSW Population Health Survey (SAPHaRI) 2013. Centre for Epidemiology and Evidence, NSW Ministry of Health*
	Prevalence of psychotic disorders amongst adults.	Estimates from the 2010 NSMHWB Survey of People Living with Psychotic Illness indicated that 0.45% of the population aged 18 to 64 accessed treatment annually from public sector mental health services for a psychotic disorder, with schizophrenia being the most common. About two-thirds of these people experienced their initial episode of psychotic illness before they turned 25. *Morgan VA, Waterreus A, Jablensky A, Mackinnon A, McGrath JJ, Carr V et al. 2011. People living with psychotic illness 2010. Canberra: DoHA,, cited in Australian Institute of Health and Welfare 2015. Mental health services—in brief 2015. Cat. no. HSE 169 Canberra: AIHW*

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
	Prevalence of severe mental health disorders	The Department of Health estimates that 3.1% of the adult population have a severe mental illness. Applying this figure to the 2017 ERP for the NBMPHN, the estimated number of individuals with a severe mental illness would be around 11,700. Assuming a uniform distribution, the numbers of individuals by LGA would be approximately: • Blue Mountains: 2,540 • Hawkesbury: 2,112 • Lithgow: 650 • Penrith: 6,410 *Australian Government Department of Health, Primary Mental Health Care Services For People With Severe Mental Illness, Canberra, 2016* *Estimated Resident Population by LGA, Australian Bureau of Statistics, 2017* Estimates for the NBM population indicate that 21% of adults with a mental health illness had a severe mental health disorder (12,191 persons) *Mental Health of Nepean Blue Mountains Local Health District Population, 2017*

	Prevalence of mild mental illness and those 'at risk' of mental illness	The *Primary Health Network (PHN) Primary Mental Health Care Flexible Funding Pool Implementation Guidance* for *Stepped Care* states that nationally the prevalence of people 'at risk' of mental illness is 23.1% and those with 'mild illness' is 9.1%. When applied to projected 2017 Estimated Resident Population (ERP) data for NBMPHN: • the total 'at risk' population was estimated at 87,332, and • those with 'mild illness' was estimated at 34,403. Broken down into Local Government Areas (LGAs), the data show the following estimated distribution: • Blue Mountains: o At risk: 18,956 o Mild illness: 7,467 • Hawkesbury: o At risk: 15,738 o Mild illness: 6,199 • Lithgow: o At risk: 4,865 o Mild illness: 1,916 • Penrith: o At risk: 47,772 o Mild illness: 18,819 *Primary Health Network (PHN) Primary Mental Health Care Flexible Funding Pool Implementation Guidance, Department of Health, Canberra, 2016* *Estimated Resident Population by PHN and LGA, Australian Bureau of Statistics, 2017* Estimates for the NBM population indicate that 46% of adults with a mental health illness had a mild mental health disorder (26,704 persons). *Mental Health of Nepean Blue Mountains Local Health District Population, 2017*

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
	Prevalence of mental disorders amongst children and youth.	The "Young Minds Matter" survey (2013–14) showed that 13.9% of 4 to 17 year olds were assessed as having mental health disorders in the previous 12 months. Males were more likely than females to have experienced mental disorders in the 12 months (16.3% compared with 11.5%). ADHD was the most common disorder (just over 7%), followed by anxiety disorders (just under 7%), major depressive disorder (3%) and conduct disorder (2%). When applied to 2013 population data, the distribution of this cohort of young people (4-17 years) affected by a mental health disorder over 12 months is estimated as: • Blue Mountains: 1,980 • Hawkesbury: 1,810 • Lithgow: 500 • Penrith: 5,090 • NBMPHN: 9,390 In the NBM population in 2017, this is equivalent to 9,883 children and adolescents (4-17 years) who had a mental health disorder in the previous 12 months. *Lawrence D, Johnson S, Hafekost J, Boterhoven De Haan K, Sawyer M, Ainley J, Zubrick SR (2015) The Mental Health of Children and Adolescents. Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing. Department of Health, Canberra.* *Estimated Resident Population by Australia, PHN and LGA, Australian Bureau of Statistics, 2013* *Mental Health of Nepean Blue Mountains Local Health District Population, 2017*

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
	Prevalence and regional variation in long term mental health problems	A long-term condition is defined as a condition that is current and has lasted, or is expected to last, for 6 months or more. In 2011-12 in the NBM population, the prevalence of people with a long-term mental health problem varied by LGA, with the highest prevalence in the Lithgow LGA. The age-standardised rate of long-term mental health conditions per 100 persons, from highest to lowest was: Lithgow (14.9), Blue Mountains (13.3), Hawkesbury (13.1) and Penrith (12.3). In addition, the prevalence of long-term mental health conditions was higher in females than males in all LGAs. *Mental Health of Nepean Blue Mountains Local Health District Population, 2017*
	Profile of young people accessing the Penrith headspace centre during 2015-16	The age profile of Penrith headspace centre users is similar to national averages of headspace centre, as follows: • Under 12: 0.4% of young people (0.2% national average) • 12-14: 22.1% of YP (21.4% national average) • 15-17: 37.0% of YP (32.2% national average) • 18-20: 23.1% of YP (23.7% national average) • 21-23: 14.3% of YP (16.7% national average) • 24-25 3.0% of YP (5.5% national average) • Over 25: 0% of YP (0.2% national average). The living situation of Penrith headspace centre users is similar to the national averages of headspace centre users, as follows: • Accommodation not an issue: 91.3% of YP (89.4% national average) • Accommodation is an issue: 6.6% of YP (8.7% national average) • At risk of homelessness: 1.3% of YP (1.4% national average) • Homeless: 0.8% of YP (0.4% national average).

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
		The primary issue young people presented with were higher than national averages for situational and alcohol or other drug issues and lower for mental health and behaviour, sexual/physical health and vocational assistance: • Mental health and behavior issues: 75.1% of YP (76.3% national) • Situational issues (including grief, conflict, bullying, trauma, homelessness, violence: 18.5% of YP (13.7% national) • Alcohol and other drugs: 3.6% of YP (2.4% national) • Physical and sexual health: 1.7% of YP (4.1% national) • Vocational assistance: 0.5% of YP (1.6% national) • Other: 0.8% of YP (1.8% national) The stage of mental illness of Penrith headspace centre users is similar to national averages. The exception is *Stage 1a mental illness* at the Penrith centre, which is 7.8% percentage points higher than the national average. The proportions of all Penrith clients in 2016-17, by headspace stage of classification was: • Stage 0 – No symptoms of mental disorder: 7.6% of young people (YP) (compared to 10.1% national average) • Stage 1a – Mild to moderate general symptoms: 37.4% of YP (compared to 40.0% national average) • Stage 1b – Sub-threshold diagnosis: 20.3% of YP (compared to 20.4% national average) • Stage 2 – Threshold diagnosis: 15.6% of YP (compared to 17.6% national average) • Stage 3 – Period of remission: 0.6% of YP (compared to 1.9% national average) • Stage 4 – Ongoing severe symptoms: 4.6% of YP (compared to 3.9% national average) • Not applicable: 13.9% of YP (compared to 6.1% national average)

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
		headspace Penrith Centre Activity Overview Report. Financial Year 2016/17 (1 July 2016 to 30 June 2017)
	Burden of mental ill health.	Mental disorders are the third leading cause of disability burden in Australia, accounting for an estimated 27% of the total years lost due to disability. Major depression accounts for more days lost to illness than almost any other physical or mental disorder. Mental and behavioural disorders were the 5th leading cause of death in the NBM region, accounting for 4.9% of all deaths (110 deaths) in 2015. *Epidemiological Profile of the NBMLHD Local Government Areas 2017: Causes of death Health Statistics NSW: Deaths by category and cause, NBMPHN 2015*
	Comorbidity of mental health disorders	In the NBM adult population aged 18-85 years in 2017, an estimated 9,288 persons (3.2% of the general population and 16% of people with a mental health illness) had two or more mental health disorders. In addition, an estimated 33,961 persons (11.7% of the general population and 58.7% or people with a mental health illness) had one or more co-morbid physical conditions. *Mental Health of Nepean Blue Mountains Local Health District Population, 2017*
	Mental disorder hospitalisations.	In 2015/16, there were 8,314 hospitalisations for mental health disorders, comprising 6.5% of all hospitalisations and with an average length of stay 6.2 bed days. The NBMLHD hospitalisation rate for mental health disorders for males (2,140) and females (2,420 per 100,000 persons) was significantly higher than for NSW (1,618 and 1,931 per 100,000 persons for males and females respectively).. *Mental Health of Nepean Blue Mountains Local Health District Population, 2017*

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
Mental Health Treatment Plans	The number of people accessing GP Mental Health Treatment Plans in the NBM PHN is slightly higher than the state-wide rate, suggesting relatively higher levels of need.	Medicare Australia MBS item data shows that 54,739 GP Mental Health Treatment Plans were prepared in the Nepean-Blue Mountains (NBM) Medicare Local (assumed to have the same boundary as NBMPHN) in the 2015-16 financial year. This was equivalent to 14,478 GP Mental Health Treatment Plans prepared per 100,000 population. This rate is 7% higher than the Australian (AUS) per capita rate of 13,514 services per 100,000 population. *MBS item data by Medicare Local and all Medicare Locals, Medicare Australia, 2015-16 financial year* *Estimated Resident Population by PHN and Australia, Australian Bureau of Statistics, 2016*
Mental health care provided by General Practitioners	Increasing proportion of general practice encounters that were mental health-related and number of MBS mental health-related services	Analysis of BEACH study data across Australia revealed that an estimated 12.4% of all GP encounters in 2015-16 were mental health related. This was much higher than the number of mental health-specific MBS subsidised GP services billed; it is thought the remainder were likely billed as general MBS items. Of GP encounters that were mental health related, only 18.1% in 2015-16 were billed using mental health-specific MBS items (an increase from 14.7% billed in 2011-12). In addition, the average annual increase in the number of MBS subsidised mental health-related GP services was 7.6% between 2011-12 and 2015-16. The most common mental health-related issues in 2015-16 managed by GPs were: depression (32.1%), anxiety (16.6%) and sleep disturbance (12.1%) *Mental Health Services In Brief, 2017: Mental health care provided by general practitioners*
Geographic access to mental health services in the NBMPHN	Usage of MBS funded services differ across the NBMPHN catchment.	The number and age-standardised rate of MBS funded services for preparation of a mental health treatment plan is given by the National Health Performance Authority.. The age-standardised rate of services for the preparation of a mental health treatment plan by general practitioners in 2013-14, by SA3 local area level were: • Blue Mountains: 6,049 people per 100,000 (in the top decile for Australia) • Hawkesbury: 4,996 people per 100,000

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
		• Richmond-Windsor: 4,865 per 100,000 • Lithgow-Mudgee: 3,911 people per 100,000 • St Marys: 4,044 per 100,000 • Penrith: 4,660 people per 100,000 *National Health Performance Authority, Australian Atlas of Healthcare Variation, 2015: General Practitioner Mental Health Treatment Plans,* The underlying drivers for this variability across the NBMPHNs catchment need further exploration: it may reflect underlying population needs; relative transport accessibility of GP services; differences in the number of GPs interested in preparing mental health treatment plans; and/or differences in the availability of support services that act as an alternative to GPs.
Risk Factors	Identified risk factors for mental illness.	In the most recent Australian Burden of Disease study the leading attributable risk factors in mental disorders were found to be the harmful effects of alcohol (9.7% of attributable burden), illicit drugs (8%), child sexual abuse (5.8%) and intimate partner violence (5.5%). *Begg S, Vos T, Barker B. The burden of disease and injury in Australia, 2003. Cat. no. PHE 82 edition. Canberra: AIHW, 2007 cited in NBMLHD Epidemiological Profile: Mental Ill Health. 2014*
MHNIP clients	Under-represented sub-regional areas; number of MHNIP clients relative to the regional MHNIP benchmarks.	MHNIP MDS data indicates that there were 105 MHNIP clients in the NBMPHN in 2016-17. The distribution of these individuals across the LGAs was: • Blue Mountains: 61 • Hawkesbury: 15 • Lithgow: 13 • Penrith: 16

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
		The MHNIP data can also be expressed as a proportion per 100,00 people. The proportion of people accessing MHNIP in the NBMPHN was 29 per 100,000. The distribution of these individuals across the LGA was: • Blue Mountains: 79 per 100,000 • Hawkesbury: 23 per 100,000 • Lithgow: 62 per 100,000 • Penrith: 8 per 100,000 Applying the proportions specified in the *MHNIP Evaluation Report* (0.58% of the 18-64-year-old population) implies that the target MHNIP clients for the NBMPHN is 1,288. Broken down across the LGAs, the target population in each region would be: • Blue Mountains: 270 • Hawkesbury: 230 • Lithgow: 70 • Penrith: 710 The shortfall between actual clients and benchmark clients can be calculated by taking the difference between the MHNIP benchmark target clients and current MHNIP clients. The shortfall in the NBMPHN is estimated 1,175 individuals. The indicative MHNIP shortfall in each LGA would be: • Blue Mountains: 209 • Hawkesbury: 215 • Lithgow: 57 • Penrith: 694 *Healthcare Management Advisors, Evaluation of the Mental Health Nurse Incentive Program: Final Report, Melbourne, 2012* *Australian Bureau of Statistics, Estimated Resident Population by LGA, 2016* *Department of Health, MHNIP clients; Minimum Dataset Extraction, 2016-17*

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
Aboriginal and Torres Strait Islander population distribution	The population of Aboriginal and Torres Strait Islander people is not evenly dispersed amongst the NBMPHN LGAs.	Based on 2016 census data, the number of Aboriginal and Torres Strait Islander people in the NBMPHN numbered around 13,165. The breakdown of Aboriginal and Torres Strait Islander population across the LGAs was: • Blue Mountains: 1,823 • Hawkesbury: 2,393 • Lithgow: 1,208 • Penrith: 7,741 The above figures translate to an Aboriginal and Torres Strait Islander population proportion of 3.7% in the NBMPHN. The breakdown of Aboriginal and Torres Strait Islander population proportions by LGAs was: • Blue Mountains: 2.4% • Hawkesbury: 3.7% • Lithgow: 5.7% • Penrith: 3.9% *Australian Bureau of Statistics, Estimated Aboriginal and Torres Strait Islander Resident Population by LGA, 2016*
Aboriginal People and Prevalence of Long-term Mental Health Condition	The number of Aboriginal and Torres Strait Islander people with a long-term mental health condition in the NBMPHN is potentially large.	The *National Aboriginal and Torres Strait Islander Social Survey* indicates that 29.3% of Aboriginal and Torres Strait Islander people aged 15 years and over have a long-term mental health condition. Applying this figure to the NBMPHN population implies that around 3,857 Aboriginal and Torres Strait Islander people in the NBM region have a long-term mental health condition. Across the PHN LGAs this would be: • Blue Mountains: 534 • Hawkesbury: 701 • Lithgow: 354 • Penrith: 2,268 *Australian Bureau of Statistics National Aboriginal and Torres Strait Islander Social Survey: 2014-15, Canberra, 2016*

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
		Australian Bureau of Statistics, Estimated Aboriginal and Torres Strait Islander Resident Population by LGA, 2016
Aboriginal People and Psychological Distress	The number and proportion of Aboriginal and Torres Strait Islanders with *high* or *very high* levels of psychological distress is large.	The *National Aboriginal and Torres Strait Islander Social Survey* indicates that 32.8% of Aboriginal and Torres Strait Islander people have *high* or *very high* levels of psychological distress. Applying this figure to the NBMPHN population implies that 4,318 Aboriginal and Torres Strait Islanders have a long-term mental health condition. Applying LGA proportions to this total implies the number of Aboriginal and Torres Strait Islander people with a long-term mental health condition by LGA would be: • Blue Mountains: 598 • Hawkesbury: 785 • Lithgow: 396 • Penrith: 2,539 *Australian Bureau of Statistics* National Aboriginal and Torres Strait Islander Social Survey: 2014-15*, Canberra, 2016* *Australian Bureau of Statistics, Estimated Aboriginal and Torres Strait Islander Resident Population by LGA, 2016* In 2012-13 in the Sydney-Wollongong area 27.3% of adult males and 41.9% of adult females were found to have high or very high levels of psychological distress. Rates of high/very high psychological distress were significantly higher for women than men in every age group, apart from those aged 45–54 years. Aboriginal and Torres Strait Islander people aged 18 years and over were 2.7 times more likely than non-Indigenous people to have experienced high/very high levels of psychological distress (age standardised). This pattern was evident for men and women across all age groups.

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
		Australian Bureau of Statistics. (2013). Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-13. ABS Cat. No. 4727.0.55.001. Canberra, ACT: Australia.
Aboriginal People And Service Accessibility	A relatively low proportion of Aboriginal and Torres Strait Islander people access psychological and psychiatric services. A relatively higher proportion of Aboriginal and Torres Strait Islander people access the Access to Allied Psychological Services program	Based on MBS services claimed across Australia, Indigenous Australians were less likely than non-Indigenous Australians in 2015-16 to have claimed through Medicare for psychologist care (133 compared with 200 per 1,000) or psychiatric care (52 compared with 97 per 1,000). In comparison, Indigenous Australians across Australia utilised the Access to Allied Psychological Services program at 3.5 times the rate of non-Indigenous Australians in 2015-16, had a higher rate of mental health related problems managed by GPs per 1,000 encounters between 2010 and 2015, and a higher rate of community mental health service contacts compared to non-Indigenous Australians, 2014-15. These findings indicate that Indigenous Australians are accessing primary care mental health services more readily than specialist services, in comparison to non-Indigenous Australians. *Aboriginal and Torres Strait Islander Health Performance Framework: 2017 Report*

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
Aboriginal People Hospitalisation	The proportion of Aboriginal people hospitalised for mental health conditions is high relative to non-Indigenous Australians.	The age-standardised hospitalisation rate for mental health-related conditions (Australia, 2012/13 - 2014-15) was 2.1 times higher for Indigenous males compared with non-Indigenous males and was 1.5 times higher for Indigenous females compared with non-Indigenous females. The rate of hospitalisations with specialised psychiatric care was 2 times as high for Indigenous Australians (12 per 1,000) than for non-Indigenous Australians (6 per 1,000). The rate of hospitalisations without specialised psychiatric care was 3.2 times as high for Indigenous Australians (13 per 1,000) than for non-Indigenous Australians (4 per 1,000) (Table 3.10.9). *Aboriginal and Torres Strait Islander Health Performance Framework 2017* Figure 3.10-4 Age-standardised hospitalisation rates for mental health related conditions, by Indigenous status and jurisdiction, July 2013–June 2015

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
Aboriginal People Mental Health, Drug & Alcohol	Substance abuse is a high risk factor for development of mental disorders in Aboriginal communities.	One-third of the burden of disease and injury due to mental disorders amongst Aboriginal and Torres Strait Islander peoples may be attributable to illicit drugs. *Vos T, Barker B, Stanley L, Lopez AD 2007. The Burden of Disease and Injury in Aboriginal and Torres Strait Islander peoples 2003, School of Population Health, The University of Queensland, Brisbane* In 2014-15, 431% of Aboriginal and Torres Strait Islander people aged 15 years and over said that they had exceeded the single occasion risk guidelines for alcohol in the previous year, and 31% said they had used a substance in the previous year. Males were significantly more likely than females to have exceeded the single occasion risk guidelines for alcohol (39% compared with 21%) and to have used an illicit substance in the previous year (34% compared with 27%). *Australian Bureau of Statistics (2016). National Aboriginal and Torres Strait Islander Social Survey, 2014-15: Health risk factors*
		In 2013-14 the population rate of methamphetamine-related hospitalisation amongst Aboriginal males was approx. 6 times higher than non-Aboriginal males. Among Aboriginal females, the rate was just under 8 times higher. *Crystalline Methamphetamine Background Paper – NSW Data, September 2015 (Revised), NSW Ministry of Health 2015, retrieved from http://www.healthstats.nsw.gov.au/IndicatorGroup/publications*
Aboriginal People Mental Health & Health Literacy	Lack of mental health literacy contributes to poor health outcomes.	Increased opportunities for education to improve health literacy will further enable Aboriginal people to make informed health decisions for themselves and their families *National Aboriginal and Torres Islanders Health Plan 2013-2023*

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
Service Integration **CALD Communities**	Lack of data.	Data on mental illness amongst migrant communities in the NBM region is not collected and it is not known whether particular CALD communities face higher than average mental health risks. *NBMPHN Suicide Prevention Stakeholder Consultation 24/2/16*
Causes of Mental Health Disorders **CALD communities**	Additional risk factors faced by members of CALD communities	Contributing causes of mental health issues are low socio-economic status, migration, pre-migration (including traumatic events) and post-migration (financial stresses, unemployment, isolation, language barriers, family breakdown and acculturation). *Breaking Barriers Bringing Understanding (3BU) Project report, Nepean Migrant Access, 2016*
Service Integration **CALD Communities**	Mental health issues common amongst local Syrian refugee intake..	Local settlement services have indicated that approximately 45 Syrian refugee families have settled in the Penrith LGA since March 2016. Focus group discussions held with local Syrian refugee communities highlight common mental health issues experienced among this group include: sleeplessness, trauma, anxiety, depression, loneliness, isolation and other psychological issues affecting wellbeing. *Wentworth Healthcare Limited 2016 - Addressing the needs of Syrian and Iraqi refugees in the Nepean Blue Mountains region: a formative assessment of health and community services needs*.
Service Integration **LGBTI**	Higher rates of mental illness for LGBTI population.	Research indicates that mental ill health rates within these groups are significantly higher than the general population. *Rosenstreich, G. (2013) LGBTI People Mental Health and Suicide. Revised 2nd Edition. National LGBTI Health Alliance. Sydney*

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
Service Integration Prison Population Post Release	Correctional facilities in the NBM region.	4 of the 33 NSW correctional centres and 3 community corrections offices are located in the NBM region.
Access to mental health services in underserviced and / or hard to reach populations	The number of individuals who speak a language other than English at home accounts for a small, but notable portion of NBMPHN PIR clients.	Of the 643 clients registered under the NBMPHN PIR program, 33 clients (5.1%) spoke a language other than English at home. The 2011 Census found that about 34,000 people (or 11.8%) in the NBMPHN catchment spoke a language other than English, including 3,700 individuals who did not speak English well or at all. Local service provider stakeholder consultations indicate these numbers were higher than the estimates of people who spoke a language other than English in the NBMPHN catchment, based on the 2016 Census. This is likely due to an underestimate of CALD populations in the 2016 Census. The percentage difference (3.6 vs 11.8) reflects the difficulty experienced by PIR in engaging members of CALD communities with mental health services. *NBMPHN, Partners in Recovery program database as at 3 November 2017* *Australian Bureau of Statistics, Census 2011: Language Spoken at Home* *NBMLHD Multicultural Health Services Unit*
	The number of individuals who are boarding house residents: people in homeless shelters and homeless people living in public places accounts for a small portion of NBMPHN PIR clients.	During the PIR program reporting period 2016/2017, 17 registered clients of the NBMPHN program were homeless (n=4 boarding / rooming house / hostel or hostel type accommodation; n=2 homeless persons' shelters; n=11 public place (homeless)). Homeless clients comprised 4.4% of all PIR program clients in the NBMPHN. Applying this proportion to estimates of the prevalence of severe mental illness (3.1% of the adult population above) gives the following numbers: • NBMPHN: 516 (both homeless and experiencing severe mental illness):

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
		○ Blue Mountains: 112 ○ Hawkesbury: 93 ○ Lithgow: 29 ○ Penrith: 282 These numbers may be slightly overstated as PIR specifically targets people with complex circumstances, including homelessness. According to the AIHW Report *Australia's Welfare 2017*, approximately 105,240 people were homeless at the time of the 2011 Census. Applying an estimated rate of mental illness among homeless people of 31% would suggest there would be a minimum of 32,600 homeless people nationally who would also have a mental illness. Applying these proportions to the NBMPHN, the estimated numbers of people who are both homeless and experiencing mental illness would be as follows: • NBMPHN: 1,354 homeless (420 with mental illness) comprising: ○ Blue Mountains: 401 homeless (124 with mental illness) ○ Hawkesbury: 333 homeless (103 with mental illness) ○ Lithgow: 103 homeless (31 with mental illness) ○ Penrith: 1,011 homeless (313 with mental illness) *NBMPHN, Partners in Recovery reporting template, 2015-16* *AIHW Report: Australia's Welfare, 2017* *Estimated Resident Population by LGA, Australian Bureau of Statistics, 2017*
	The estimated number of LGBTI people experiencing a major	Figures from the LGBTI Health Alliance estimate the number of LGBT people experiencing a major depressive episode [no estimates were available for Intersex individuals]. Based on national data and assuming a uniform national distribution, 3.4% of people in the Australian population identify as lesbian or gay, about 1% identify as bisexual, 0.3% are

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
	depressive episode is very high relative to the general population.	transgender and 1.7% are intersex. Applying these proportions to the NBMPHN population indicates that around 23,537 people in the PHN catchment area are LGBTI. Using the 2016 ERP proportions, the distribution of LGBTI people across the LGAs is therefore: • Blue Mountains: 5,037 • Hawkesbury: 4,233 • Lithgow: 1,377 • Penrith: 12,890 The estimated number of LGBT people, between 10-84 years, in NBMPHN experiencing a major depressive episode in a given year is: • Lesbian, gay and bisexual: 3,340 (24.4%) • Transgender: 338 (36.2%) *National LGBTI Health Alliance, LGBTI People: Mental Health and Suicide, Newtown, 2013* *Australian Bureau of Statistics, Estimated Resident Population by LGA, 2016*
	Unmet need: the number of PIR registered clients with severe mental and complex care needs, relative to estimated underlying prevalence of severe mental health disorders, is low.	The PIR Program Database indicates that there have been 643 registered clients (current and exited) since program implementation in 2013 of which 575 have fixed addresses in the NBM region. The estimated distribution of these individuals across the LGAs is: • Blue Mountains: 91 (0.12% of LGA population) • Hawkesbury: 109 (0.17% of LGA population) • Lithgow: 38 (0.18% of LGA population) • Penrith: 337 (0.17% of LGA population) *NBMPHN, Partners in Recovery program database as at 3 November 2017* *Australian Bureau of Statistics, Estimated Resident Population by LGA, 2016*

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
	Under-represented sub-regional areas; number of PIR registered clients relative to the regional PIR benchmarks.	The PIR operational guidelines indicate that 0.4% of the adult population have a severe and persistent mental illness with complex needs. Applying this proportion to the 2017 ERP implies there are around 1,511 individuals with a severe and persistent mental illness with complex needs in the NBMPHN. Based on the 2017 ERP population data, the total number of people with a severe and persistent mental illness with complex needs in each LGA would be: • Blue Mountains: 328 clients • Hawkesbury: 272 clients • Lithgow: 84 clients • Penrith: 827 clients The above estimations only include individuals with severe and persistent mental illness *and* complex needs. The difference between the number of potential clients and the number of registered clients is: • Blue Mountains: 237 • Hawkesbury: 163 • Lithgow: 46 • Penrith: 490 *Department of Health, Based on Partners in Recovery, Annual report: 2014-15, Canberra, 2015* *NBMPHN, Partners in Recovery reporting template, 2015-16* *Australian Bureau of Statistics, Estimated Resident Population by LGA, 2017* *Department of Health and Ageing, Partners in Recovery: Operational Guidelines for PIR Organisations, 2013*
	Unmet need: the number of Aboriginal and Torres Strait Islander PIR registered clients relative to	The PIR Program Database indicates that there were 97 Aboriginal and Torres Strait Islander registered clients (active and exited) in the NBMPHN in 2016-17. The distribution of these individuals across the LGAs was:

Outcomes of the health needs analysis – Priority Theme: *Mental Health*		
	estimated underlying prevalence of severe and complex mental health disorders is very low.	• Blue Mountains: 6 • Hawkesbury: 23 • Lithgow: 6 • Penrith: 55 *NBMPHN, Partners in Recovery program database as at 3 November 2017*

Section 3 – Outcomes of the service needs analysis

SUICIDE PREVENTION

Outcomes of the service needs analysis – Priority Theme: *Suicide Prevention*		
Identified Need	Key Issue	Description of Evidence
Risk Assessment	Identification of risk for suicide is not perceived as systematic or effective across services.	Stakeholders perceived a general absence of systematic processes for risk identification and intervention at the primary care level of service provision. Further research is needed to explore the approaches to suicide risk assessment across primary care providers. Investigation needs to assess the type of presentations being assessed, the tools used, and the range of service providers involved. *NBM Suicide Prevention Stakeholder Consultation 24/2/16*
Referral Pathways	Wide variation in referral pathways for people at risk of suicide.	The perceived barriers and problems concerned with referral for people at risk of suicide include: • Lack of easily understood and accessible clinical referral pathways. • Lack of easily understood and accessible community program referral pathways. • Lack of utilisation in some regions of ATAPS SOS for mild to moderate suicidality. *NBM Suicide Prevention Stakeholder Consultation 24/2/16* *NBMLHD Mental Health & Suicide Prevention Focus Group 2/3/16* *ATAPS Program Feedback*

Outcomes of the service needs analysis – Priority Theme: *Suicide Prevention*		
Gaps And Barriers To Service Provision	There are a number of key barriers to accessing appropriate services to support people in the community, who have a history of self-harm, suicide ideation or suicide attempt.	Limited or absent support in the community for people at risk of suicide has been identified at all levels of primary care. This includes inadequate support after discharge from hospital due to limited service availability coupled with long waiting lists. Overall stakeholders perceive the absence of appropriate community based support for people at risk of suicide either due to too few services with long waiting lists, or needed services that are not provided, or inappropriate services. Preliminary stakeholder consultation has identified the following concerns regarding barriers to service provision for suicide prevention: • Lack of support in the community following discharge from MH inpatient unit. • Limited access to community MH programs due to waiting lists. Lack of appropriate community programs in the region. • Lack of interventions for people who repeatedly self-harm or attempt suicide e.g. similar to Early Psychosis Intervention program for young people. • Lack of long-term interventions for young people who are engaged with homelessness services or with previous foster care and/or family breakdowns. Further investigations are needed to clarify the range of service models needed and where they may be located. *NBM Suicide Prevention Stakeholder Consultation 24/2/16* *Commonwealth-funded Community-based Suicide Prevention Project List,* distributed by *Department of Health, 2016* *Stakeholder Consultation, NGO 26/2/16*
Culturally Safe Suicide Prevention For Aboriginal People	Appropriate and culturally safe suicide prevention programs are not provided within the NBM region.	Stakeholder feedback indicates that suicide prevention programs that involve Aboriginal people in service provision are needed to support Aboriginal people at risk of suicide. NBMLHD has one Aboriginal trainee position located in Lithgow providing mental health

Outcomes of the service needs analysis – Priority Theme: *Suicide Prevention*		
		services. It has been widely acknowledged by stakeholders that suicide prevention programs run by Aboriginal people are absent from the NBM region. Further investigation is necessary to establish the range and type of services needed. *NBM Suicide Prevention Stakeholder Consultation 24/2/16* *NBMLHD Mental Health Consultation 2/3/16*
Skills And Training Capacity	Appropriate skills and training for suicide prevention and follow up support is generally regarded as inadequate throughout the NBM region. The need for specialised skills has been identified to support suicide prevention amongst especially vulnerable populations, including Aboriginal people, youth and CALD populations.	Stakeholders have indicated that skills and training for suicide prevention are generally inadequate and further investigation is required on models of care, skills required and different options for capacity building through training support. Stakeholders have indicated that: • Suicide prevention training and capacity amongst primary healthcare providers is unclear. • Need for education and training for non-clinical workers who have contact with high-risk people e.g. police, ambulance. • Lack of DBT (Dialectical Behaviour Therapy) training and services in the region. • Lack of relevant staff and training in youth specific mental health first aid at local schools. • Lack of cross-cultural suicide training for workers. These issues requires further investigation to understand the extent of the gap. *NBM Suicide Prevention Stakeholder Consultation 24/2/16*
Continuity Of Care	Barriers to follow up and support subsequent to assessment for people at risk of suicide indicate breakdowns in continuity of care,	Stakeholders have identified barriers to follow up and support between hospital discharge and the community based ACCESS team. There are concerns that these services are unable to accommodate the demand for services within the region. Further

Outcomes of the service needs analysis – Priority Theme: *Suicide Prevention*		
	and the likely need for formalised care coordination across suicide prevention services.	investigations are required to fully assess the nature of these barriers to continuity of care. Preliminary stakeholder engagement has indicated the following concerns: • Lack of follow-up from ACCESS team due to time constraints and difficulty in contacting people. • People discharged from ACCESS team may not have a GP, aren't followed up by GP or don't make an appointment. • Lack of support for family members when people are discharged from hospital into their care. *NBMLHD Mental Health & Suicide Prevention Focus Group 2/3/16* *NBM Suicide Prevention Stakeholder Consultation 24/2/16* Refer *Clinical Care of People Who May Be Suicidal, NSW Health Policy Directive, 2016*
Absence Of Quantitative Evidence To Support Analysis Of Demand For Services	Access to data to support analysis of demand for suicide prevention services is poor.	Research to date indicates that potentially important data to support planning for suicide prevention is not available. In particular, it is important to analyse the extent to which vulnerable populations such as Aboriginal people, adult men and youth, utilise telephone services. *NBM Suicide Prevention Stakeholder Consultation 24/2/16*
General Population Awareness Of Support For Suicide Prevention	Community awareness of suicide and risks is perceived as inadequate at the regional level. Poor community awareness may result in hidden prevalence of suicidal behaviors.	Preliminary stakeholder consultations indicate that the actual prevalence of suicidal behaviours and risk is likely to be underestimated because the general population is not sufficiently aware of the presentations and behaviours that indicate risk and the opportunities to support people who are at risk. Stakeholders have indicated that there is: • Lack of community engagement and understanding of suicide - prevalence is hidden.

Outcomes of the service needs analysis – Priority Theme: *Suicide Prevention*		
		• Lack of education and awareness to reach people who don't access mental health services. Some national public health campaigns are not localised. *NBM Suicide Prevention Stakeholder Consultation 24/2/16*
Evaluation Of Service Models	Existing models of care provided to the community to prevent suicide and support people who are at risk may not be properly evaluated and may be inappropriate for the needs of the community.	Preliminary stakeholder consultation has indicated a lack of evaluation of existing service models for suicide prevention and support services. *NBM Suicide Prevention Stakeholder Consultation 24/2/16*
Models For Effective Suicide Prevention Stakeholder Engagement	There are no appropriate community consultation and stakeholder engagement models for suicide prevention in the NBM region.	Preliminary stakeholder consultation has indicated the importance of appropriate community consultation and stakeholder engagement models to identify service needs and provide ongoing feedback for capacity development and evaluation of service models. *NBM Suicide Prevention Stakeholder Consultation 24/2/16*
Support for suicide prevention	The pool of current NBMPHN funds available to support suicide prevention is relatively small relative to underlying need. Suicide Prevention Australia	Current NBMPHN services people at low to medium risk of suicide. There is scope to enhance active engagement with people who are discharged from hospital after attempted suicide or self-harm. SPA provide support for PHNs Australia wide via its extensive membership network, online best practices hub (as of 2018), which will integrate with resources by other projects in Australia) to establish centralised information surrounding suicide prevention. SPA is developing operational relationships with PHNs mental health and/or suicide prevention advisory committees.

Outcomes of the service needs analysis – Priority Theme: *Suicide Prevention*		
	Limited Post suicide prevention for young people	*National Suicide Prevention Leadership and Support Program - PHN Resource 2017* Local service provider consultations indicate that there is a lack of post suicide prevention support services available for young people, particularly in the Lithgow LGA. There is currently no safe place for children to express their emotions or feelings when someone close or in their community has died by suicide. Provision for supporting community after suicide or suicide attempts to help educate and support affected members would be essential for improving the current situation. *Consultations with NBMLHD local health service providers , 2017*
Short term psychological intervention	Access to ATAPS suicide prevention and support services varied across the NBMPHN. The proportion of suicide prevention sessions of total ATAPS sessions in the NBMPHN is large compared to national figures.	The ATAPS suicide prevention service has to date been utilized to its full funding capacity and is a well-regarded and supported service among GP referrers and allied health providers. This service fills a previous regional gap by providing a GP referral pathway for people at mild to moderate risk of suicide in accessing targeted, quick response short term psychological therapy services within the primary care sector. However, it is noted that referrals for this service are uneven across the region and increased significantly between 2015-16 and 2016-17. The number of ATAPS referrals for suicide prevention services in the NBMPHN in 2015-16 was 220 (60 per 100,000 population), and increased in 2016-17 to 308 (86 per 100,000 population). This number does not include referrals for those who resided outside the NBMPHN (9) who received a referral to the NBMPHN. The distribution of referrals for suicide prevention services across the LGAs was: • Blue Mountains: 171 (222 per 100,000) • Hawkesbury: 41 (63 per 100,000) • Lithgow: 9 (43 per 100,000)

Outcomes of the service needs analysis – Priority Theme: *Suicide Prevention*		
		• Penrith: 87 (44 per 100,000) Across the NBMHPN in 2015-16, the average completed suicide prevention sessions per referral was 7.9. This is notably higher than the average number of completed suicide prevention sessions per referral from the 2011-12 national data (5.4 sessions). NBMPHN data on ATAPS clients indicated there were 2,107 sessions (500 per 100,000 population) provided for suicide prevention services in 2016-17. Using the proportions of referrals by LGA, the estimated distribution of sessions across the LGAs is: • Blue Mountains: 1,170 sessions (1,521 per 100,000; 56% of NBMPHN) • Hawkesbury: 280 sessions (434 per 100,000; 13% of NBMPHN) • Lithgow: 62 sessions (292 per 100,000; 3% of NMBPHN) • Penrith: 595 sessions (303 per 100,000; 28% of NBMPHN) Suicide prevention sessions accounted for approximately 20.2% of all ATAPS sessions in 2016-17 in the NBMPHN. *NBMPHN, ATAPS data, 2016-17* *Access to Applied Psychological Services (ATAPS) program. Nineteenth Interim Evaluation Report. Update on the achievements of Tier 1 and Tier 2 ATAPS, 2012, University of Melbourne, Melbourne* *Australian Bureau of Statistics, Estimated Resident Population by LGA, 2016*

MENTAL Health

Adults with Moderate to Severe Mental Illness

Outcomes of the service needs analysis – Priority Theme: *Adults with Moderate to Severe Mental Illness*		
Identified Need	Key Issue	Description of Evidence
General Practice Mental Health Treatment Plans	General practice involvement in mental health plan development and review is widely variable across the region.	Further investigation is required into general practice uptake of mental health planning and review. The highest levels of uptake are in the Blue Mountains region and lowest in the Lithgow LGA. The Blue Mountains SA3 is in the top decile nationally, Hawkesbury and Richmond-Windsor SA3s are in the 3rd decile, and Penrith SA3 is in the 4th decile. Lithgow-Mudgee (which includes 4 SA2 regions in the NBM) is in the 7th decile for number of mental health treatment plans (age standardised, per 100,000). *Number of MBS-funded services for the preparation of mental health treatment plans by general practitioners per 100,000 people, age standardised, by SA3, 2013–14. Australian Atlas of Healthcare Variation, November 2015*
PBS Prescriptions Dispensed For Mental Health Patients	There is considerable variation across the NBM region for prescribing of: antipsychotic medicines; ADHD medicines for under 18s; and, antidepressant and anxiolytic medicines to people over 65 years of age.	Further investigation of data and consultation with general practitioners is needed to assess variation and develop appropriate local responses. Review of available data indicates the following: • The rate of prescribing antipsychotic medicines to under 18s is relatively high in Lithgow and the Blue Mountains. • The number of antipsychotic prescriptions is in the 2nd decile for Lithgow-Mudgee SA3 and 3rd decile for the Blue Mountains. • The rate of prescribing ADHD medicines to under 18s is high across the NBM region. The number of ADHD medicine prescriptions is in the top decile for

Outcomes of the service needs analysis – Priority Theme: *Adults with Moderate to Severe Mental Illness*		
		Lithgow-Mudgee SA3, 2nd decile for Blue Mountains, Penrith and Richmond-Windsor, and the 3rd decile for Hawkesbury. • The rate of prescribing antidepressant and anxiolytic medicines to over 65s is relatively low across the NBM region. Notably the rate of anxiolytic prescribing in Lithgow-Mudgee SA3 is very low (1st decile). • The rate of prescribing antipsychotic medicines to over 65s is relatively high across the NBM except in Lithgow-Mudgee. Average or lower prescribing rates across the entire NBM region for over 65s, except for antipsychotics. *Number of PBS prescriptions dispensed per 100,000 people aged 65 years and over, age standardised, by SA3, 2013–14. Australian Atlas of Healthcare Variation, November 2015*
Inpatient Facilities	Use of mental health inpatient facilities is high relative to other PHNs, particularly for same day treatment.	Across all Diagnosis Related Groups (DRGs) for Mental Health, the NBM region's relative utilisation (RU) is high at 136.7%. (RU is age/sex standardised attendance rate compared with the national average). Same day mental health treatment without ECT is very high at 176.9% RU for 3,363 separations (58.8% of total separations). *Admitted Patient Utilisation Comparisons for PHNs, Department of Health, 2016* In the NBM population in 2015/16, there were 8,929 hospitalisations for mental health disorders, comprising 7.1% of all hospitalisations. Hospitalisation rates for mental health disorders were: • Significantly higher for NBM males (2,412 hospitalisations per 100,000 population) than NSW males (1,672) • Significantly higher for NBM females (2,448 hospitalisations per 100,000 population) than NSW females (1,927). *HealthStats NSW online portal – Hospitalisations by category of cause, 2015-16*

Outcomes of the service needs analysis – Priority Theme: *Adults with Moderate to Severe Mental Illness*		
Primary Care Mental Health Services	Positive trends can be identified in the uptake of MBS mental health items by GPs, allied health and psychiatrists.	The number of mental health MBS services claimed in the NBM region increased by 28.3% between 1/7/11 and 30/06/17, from a total of 125,118 to 174,474 services. The largest growth was services claimed by clinical psychologists (35.7%) and GPs (35.5%). GPs made 36.6% of all claims, followed by "Other Allied Health" (Better Access items) at 28.0% and Psychiatrists at 19.8%. *MBS Mental Health Data by PHN, Department of Health, 2011-12 to 2016-17* *http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-Mental_Health_Data*
	Negative trends can be identified in the uptake of MHNIP services in NBM region.	The number of patients receiving MHNIP services shrunk by 55.5%, from 236 in 2014/15 to 105 in 2016/17. The number of occasions of service however increased by 15.8% over the same period, from 2,688 to 3,113. As a proportion, males made up 37% of all MHNIP patients, and received 27% of occasions of service over the 4 years from 2011/12 to 2015/16. *MHNIP Tables 2011-2015 by PHN, Department of Health, 2016* *http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-Mental_Health_Data* *NBMPHN MHNIP program database, 2016/17.*
	The Mental Health Nurse Incentive Program (MHNIP), delivered by mental health nurses in association with GPs, is a major source of clinical support to people with severe and persistent mental illness	While MHNIP services are delivered in all four LGAs in the region, the majority of services are delivered in the Blue Mountains. This is due to historical reasons as the uptake in the Blue Mountains of the MHNIP initiative was greater than in other areas of the region. GPs on the Clinical Council stated that MHNIP services are valued by GPs but overall there are insufficient services available and the distribution of available services is unequal across the region.

Outcomes of the service needs analysis – Priority Theme: *Adults with Moderate to Severe Mental Illness*		
		NBMPHN Clinical Council Consultation November 2016 Consultation with mental health nurses who currently provide MHNIP services raised the following issues: • There is a misconception that people with severe and persistent mental illness lack insight or ability to benefit from a therapeutic relationship. • The therapeutic relationship and intervention between the consumer and mental health nurse is crucial to successful service delivery. • Long term therapeutic relationship (using a variety of evidence based therapy modes) can keep consumers out of hospital and off Community Treatment Orders. • Consumers with complex trauma/post-traumatic stress disorder may not engage well with LHD community mental health services but may benefit from an ongoing therapeutic relationship with a mental health nurse. • In addition to the therapeutic role mental health nurses also provide clinical care co-ordination, ongoing monitoring of mental state, contribute to medication reviews and monitor effects of medications and consider physical health needs. As such they are in a key position to meet the needs of certain clients on a number of levels. • For some consumers long term therapy supports them to manage their own lives in a better way. • Mental health nurses provide ongoing stability and continuity of care which is important for this cohort and assists them in managing their mental health condition better. • To undertake the work nurses need to be highly skilled and there is a mixed view if credentialing is essential. Some nurses think it is important as it sets an agreed standard while others think that experienced non-credentialed mental health nurses can offer a valuable service with appropriate supervision and peer support.

Outcomes of the service needs analysis – Priority Theme: *Adults with Moderate to Severe Mental Illness*		
		• Credentialed mental health nurses have a role to play in mentoring and supervising other less experienced mental health nurses. *Mental Health Nurse Consultations October 2016 and October 2017*
Continuity Of Care After Discharge From Acute Services	Consultations indicate that there are possible breakdowns in the continuity of care for patients discharged from acute mental health services.	Further investigations are required to examine possible sources of breakdowns in continuity of care. Stakeholders have expressed the following views: • Lack of consistent approach to discharge planning including lack of coordinated follow up after discharge (unless consumer is on a Community Treatment Order). • People discharged from Mental Health Inpatient Unit do not always make a follow up appointment with their GP. • Quality of discharge summaries from Nepean Mental Health Inpatient Unit - handwritten and very hard to impossible to read. • Aftercare teams often receive limited information about requirements for patient follow-up • Consumers need to be offered active support at time of discharge in particular consumers who lack appropriate family support would benefit from personal and practical support (e.g. peer support workers) at time of discharge. • Regular follow up phone calls with consumers and carers after discharge from hospital can positively support and influence adjustment period after discharge. *NBMPHN Mental Health Stakeholder Forum 23/2/16* *Headspace Penrith Consultation 8/3/16* *NBM ML & PHN Blue Mountains Aboriginal Sharing and Learning Circle Report 2015NBMPHN GP and AHP Consultations March 2016* *PIR Consumer and Carer Group Consultation 23/3/16 and 21/10/2016* *NBMPH Clinical Council Consultation 2/11/2016*

Outcomes of the service needs analysis – Priority Theme: *Adults with Moderate to Severe Mental Illness*		
Coordination Of Care	Mental health services across the region appear to be impacted by fragmentation of service provision between different providers and between acute and primary care. This is likely to represent a care coordination issue.	Preliminary stakeholder consultation indicates a wide range of issues that may be sourced back to fragmentation of service delivery. Further research is required to establish the possible sources of fragmentation. Stakeholders have expressed the following views that may be related to fragmentation of services: • Lack of effective coordination, integration and follow up between acute and primary mental health care. • Lack of care coordination, referral pathway coordination and case management (including public and private sector and clinical as well as nonclinical services) to support consumer centered care based on consumer need rather than available service options. • Lack of service coordination and linkages to support seamless step up or step down from services. • Consumers with complex trauma need access to long-term integrated care between GP, psychiatrist, mental health nurse and psychologist (or equivalent) to support recovery journey. • Significant number of consumers are not connected to GP and do not have a 'medical home'. • Significant number of consumers without a carer - they are especially vulnerable, particularly in the older age group, and in need of care coordination. • Lack of coordination between outreach areas and Nepean Hospital for acute mental health issues. • Lack of coordination and sharing of information/results of regular screening for physical health issues between GPs and Community Mental Health. • Need for clinical multidisciplinary approach to care and sharing of information between public and private sector (e.g. private AHPs are limited in what they can treat). • Lack of access to consumer health information by NGOs.

Outcomes of the service needs analysis – Priority Theme: *Adults with Moderate to Severe Mental Illness*		
		• Community Mental Health, ACCESS and Child &Youth Mental Health services less likely to engage/accept referral if private therapist is already involved. • The centralization of referrals to community mental health teams erodes relationships between GPs and their local community mental health team. A local model where GPs can directly refer to the mental health team may increase GP confidence to take on more challenging patients with severe mental illness. • Most psychiatrists (Penrith and Blue Mountains region) do not coordinate well with mental health AHPs - lack of feedback. • Explore issues arising from the transition of Partners in Recovery to the NDIS in particular loss of care coordination capacity for people with severe mental illness who do not access the NDIS or clinical care coordination for other chronic conditions. *NBMPHN Mental Health Stakeholder Forum 23/2/16* *NBMLHD Mental Health & Suicide Prevention Focus Group 2/3/16* *2015NBMPHN GP and AHP Consultations March 2016* *PIR Consumer and Carer Group Consultation 23/3/16* *NBMML Comprehensive Needs Assessment Report 2014-15* *NBMPHN Clinical Council Consultation 2/11/ 2016*
Service Gaps **Psychiatry**	There is a perceived lack of specialist psychiatric services in the NBM region.	Further investigation of the number of specialist psychiatrist positions in the NBM region are required. Stakeholders have indicated the following concerns regarding access to specialist psychiatric services: • Lack of psychiatric services across the region. • Lack of sufficient bulk-billing by private psychiatrists (long waiting lists for those who do bulk-bill). • Long waiting lists to access public psychiatrists. *NBMPHN Mental Health Stakeholder Forum 23/2/16*

Outcomes of the service needs analysis – Priority Theme: *Adults with Moderate to Severe Mental Illness*		
		NBMPHN GP and AHP Consultations March 2016 *NBMPHN Clinical Council Consultation 2/11/ 2016* *Mental Health Nurse Consultations October 2016*
Service Gaps **GPs**	There is a lack of knowledge of which GPs are skilled and interested in supporting people with severe mental illness.	A region wide dynamic list of GPs with skills and willingness to support people with severe, persistent and complex mental illness is necessary to assist smooth referral pathways for consumers not connected to a GP. This is particularly important for those discharged from hospital. *Feedback from PIR Support Facilitators and staff October 2016*
Gaps In Service Provision	Fragmentation of mental health service provision may be further indicated by stakeholder perceptions of gaps in service provision.	Further research is needed to map existing mental health services in the region with perceived gaps in services. Stakeholders have expressed the following concerns: • Lack of evidence based treatment services for consumers with complex trauma (often diagnosed with personality disorders). • Lack of adequate psychological support for those with more complexity (trauma) and/or severe mental illness as ATAPS and Medicare 12/10 session per year is not designed to address moderate to severe issues – more subsidised sessions are needed per year for those consumers who can benefit from psychological interventions. • Lack of step down facilities from acute to sub- or non-acute care. • Lack of stepdown services from severe to moderate mental illness. • Lack of appropriate integrated service options (including between LHD and primary care) for consumers with dual mental health and D&A diagnosis. • Lack of access to mental health services for consumers with co-morbid D&A issues – strong gate keeping and specific eligibility criteria can exclude these consumers • Difficulty in getting quick access (within a week) to services for consumers in Lithgow area due to waiting lists (lack of sufficient services). • Lack of sufficient subsidised group work (e.g. mindfulness based stress reduction)

Outcomes of the service needs analysis – Priority Theme: *Adults with Moderate to Severe Mental Illness*		
		• Limitation of Medicare or ATAPS psychological therapies – does not allow work with couples or families. • Inconsistent provision of psychosocial services and appropriate social support to support consumers at all stages of their recovery journey across the region (particularly Blue Mountains, Lithgow and Hawkesbury) • Need for advance statements for Mental Health which can be uploaded to MyHealth Record – this will help avoid consumers having to retell their story over and over again when engaging with new clinical services *NBMML Report: A Snapshot of Health Needs in Cranebrook 2014* *NBMML Comprehensive Needs Assessment Report 2014-15* *Trankle, S. A.,& Reath, J. (2015). The Nepean Blue Mountains Partners in Recovery Evaluation. Campbelltown: University of Western Sydney.* *NBMPHN Mental Health Stakeholder Forum 23/2/16* *NBMPHN GP and AHP Consultations March 2016* *PIR Consumer and Carer Group Consultations 23/3/16 and 21/10/2016* *NBMPHN Clinical Council Consultation 2/11/ 2016* *NBMPHN ATAPS Stats 2013-15 – people accessing service for two consecutive years*
Gaps And Barriers To Accessing Housing And Accommodation	Access to housing and accommodation for people with mental illness is inadequate across the NBM region.	Further research is required to map the availability of housing services for the region. Relevant research and stakeholder feedback indicates that there is a lack of housing options for people with mental illness in the region and that this is having negative consequences for the wellbeing and ongoing treatment of people with mental health problems. Stakeholders have raised the following concerns: • Lack of appropriate accommodation for homeless people results in discharged from hospital to unstable accommodation and increases likelihood of re-admission.

Outcomes of the service needs analysis – Priority Theme: *Adults with Moderate to Severe Mental Illness*		
		• Lack of available accommodation for homeless people can result in unnecessary longer hospital stay (social admission). • Lack of stable long term quality accommodation which is socially supported and economically sustainable and takes into account the special needs of consumers (e.g. HASI type services). • Lack of mental health outreach services for homeless people in the region. • Insufficient emergency accommodation. *NBMML Homelessness Needs Identification Project Report 2014* *NBMPHN GP and AHP Consultations March 2016* *NBMPHN Mental Health Stakeholder Forum 23/2/16* *PIR Consumer and Carer Group Consultations 23/3/16 and 21/10/2016* *Mental Health Nurse Consultations October 2016* *Trankle, S. A.,& Reath, J. (2015). The Nepean Blue Mountains Partners in Recovery Evaluation. Campbelltown: University of Western Sydney*
Capacity Building To Support Carers And Consumers	Respite care and other types of support for carers and consumers may be inadequate in the NBM region.	Further research is required to map available support services for carers and consumers. Stakeholders have raised the following concerns: • Carers and families not sufficiently included and not receiving sufficient support (e.g. respite options). • Carers and families not adequately informed about mental health condition so they can stay safe and supportive in their own environment. • Lack of support for financial management – consumers accumulate debts which jeopardise payment for accommodation and living expenses, increases anxiety and can contribute to homelessness. • Insufficient education of consumers about prescribed medications including side effects. *NBMPHN Mental Health Stakeholder Forum 23/2/16*

Outcomes of the service needs analysis – Priority Theme: *Adults with Moderate to Severe Mental Illness*		
		PIR Consumer Group Consultation 23/3/16
Workforce Capacity Including Skills And Training	There is a general view that workforce capacity for mental health in the region could be substantially improved with training and skills development.	Further research is needed to examine the potential sources of the issues raised by stakeholders to develop appropriate options. The concerns raised by stakeholders were: • Increase GPs knowledge of available clinical and non-clinical services and their referral pathways. • Increase GP capacity to identify early if consumer needs more intensive treatment (not provided through ATAPS or Medicare) such as MHNIP. • Patchy GP mental health engagement in region. • Need for trauma education for health professionals. • Lack of GP Education dual diagnosis drug and alcohol & severe mental illness. • Insufficient dual diagnosis support and supervision for private therapist. • Lack of GP education in relation to depression in the elderly. • Lack of peer workers to help increase consumer health literacy, understanding of treatment and psycho-social support options and to provide support for people while in acute care and in the community – identified as a high need by consumer group. • Lack of support workers who are available after hours and on weekends. *NBMPHN Mental Health Stakeholder Forum 23/2/16* *NBMPHN GP and AHP Consultations March 2016* *PIR Consumer and Carer Group Consultations 23/3/16 and 21/10/2016*
	A small proportion of the total number of people in the NBM population with severe and persistent mental health illness and with complex needs access the PIR program.	There is an ongoing lack of PIR services due to the relative size of the PIR funding pool. NBMPHN has the same number of contracted PIR consumers accessing the program in 2017 as per 2016, with no further increases in funding. PIR program funding is transitioning to the National Disability Insurance Scheme (NDIS). Program funding has been extended until 30 June 2019, and will ensure service continuity during transition and to support clients to access the scheme.

Outcomes of the service needs analysis – Priority Theme: *Adults with Moderate to Severe Mental Illness*		
		NBMPHN Partners in Recovery (PIR) Program, 2017

MENTAL HEALTH OF ABORIGINAL PEOPLE

Outcomes of the service needs analysis – Priority Theme: *Mental Health of Aboriginal People*		
Identified Need	Key Issue	Description of Evidence
Service Gaps	There are no culturally safe mental health services available to Aboriginal people in the region.	Mental health services provided to Aboriginal people in the region are generally not regarded as culturally secure and supportive of the needs of Aboriginal people. Further consultation is required to assess a wide range of concerns raised by stakeholders. These include the following but wider issues are likely to be found when comprehensive stakeholder consultation is undertaken: • Lack of indigenous programs run by Aboriginal people. • Lack of culturally appropriate services and lack of Aboriginal workers in identified roles, including community programs, psychiatrists and psychologists. • No Aboriginal Controlled Medical Service in region. • Need for improved and enhanced dual diagnosis mental health and D&A services. • Aboriginal workers are not trained in clinical assessment, and clinical forms are not culturally adapted. *Stakeholder Consultation, NGO 8/3/2016* *NBMPHN Mental Health Stakeholder Forum 23/2/16* *NBM ML & LHD Blue Mountains, Penrith, Hawkesbury Aboriginal Sharing and Learning Circle Reports 2015* *NBMPHN Suicide Prevention Stakeholder Consultation 24/2/16* *NBMLHD Mental Health & Suicide Prevention Focus Group 2/3/16* *Stakeholder Consultation, NGO 8/3/2016*
		Further consultation with Aboriginal community members in each of the region's LGA confirmed previously stated concerns and in addition raised the following issues: • Need for better alignment of community and service expectations to ensure appropriate communication and accountability.

Outcomes of the service needs analysis – Priority Theme: *Mental Health of Aboriginal People*		
		• Need for alternative, complimentary programs/services that build on cultural strengths to engage and support people in developing positive coping strategies. • Need to develop partnerships and pool resources with other non-health sectors (e.g. police, education, housing, sport and recreation). • Intergenerational trauma needs to be recognised and addressed through innovative and locally developed programs. • Address and eradicate systemic racism in health services – this will help develop trust with Aboriginal communities. • Increase the number of preventative services to address underlying issues particularly for children and young people. • Lack of dual diagnosis (mental health and alcohol/other drugs) unit means people bounce between detox and psychiatric units. • Lack of mental health unit in Hawkesbury LGA. • Short funding cycles for services do not allow for trust to be built. • Need for Aboriginal Community hubs in each LGA to provide a safe meeting space. • Need for Aboriginal controlled health services in each LGA. • Need for culturally appropriate services which take a holistic and whole of family approach to emotional health and well-being. *Aboriginal community consultations Blue Mountains, Penrith, Hawkesbury, Lithgow September /October 2016*
Care Coordination	Medium to long term follow up and support is not provided through mental health programs.	The role and importance of care coordination in supporting improved health outcomes is well recognised and exemplified through Closing the Gap programs for chronic disease and Social and Emotional Wellbeing programs through Aboriginal Community Controlled Health Organisations (ACCHOs). Recently the NBMLHD commenced planning for a “Whole Family Team”, in partnership with FACS, to provide intense mental health and family support to Aboriginal mental health patients following discharge from hospital where child protection has been

Outcomes of the service needs analysis – Priority Theme: *Mental Health of Aboriginal People*		
		involved. The program will involve six months of intensive support at home involving the whole family. The family will then be linked to other LHD services for ongoing support. Further stakeholder consultation, service mapping and research will aim to identify and assess service options available to Aboriginal people with mental illness in the NBM region. *Stakeholder Consultation, NGO 8/3/2016* *Trankle, S. A., & Reath, J. (2015). The Nepean Blue Mountains Partners in Recovery Evaluation. Campbelltown: University of Western Sydney*
Workforce Training And Capacity Building	Widely perceived lack of awareness of Aboriginal mental health needs from service providers coupled with an inadequate number of designated Aboriginal specific clinical and non-clinical positions in the NBM region.	Stakeholders have indicated a general lack of awareness of the needs of Aboriginal people with mental illness, as well as the need to develop programs to target those needs. Further investigations will seek to assess the need for workforce cultural safety training, targeted program development, mental health literacy in Aboriginal communities and capacity building for Aboriginal mental health professionals. The concerns raised by stakeholders in preliminary consultations included the following: • Mental health services need willingness to engage with Aboriginal communities and need proper guidance from community members (Elders) to build trust. • Need to increase designated Aboriginal specific clinical positions in mental health. • Lack of understanding of stressors affecting the mental health of Aboriginal people, particularly intergenerational trauma and associated PTSD. • Lack of Aboriginal mentors for people undergoing treatment and therapy. • Need to increase mental health literacy in Aboriginal communities. *NBMPHN Mental Health Stakeholder Forum 23/2/16* *NBM ML & LHD Blue Mountains, Penrith Aboriginal Sharing and Learning Circle Reports 2015*

Outcomes of the service needs analysis – Priority Theme: *Mental Health of Aboriginal People*		
		Consultations with Aboriginal community members in Penrith, Hawkesbury, Blue Mountains and Lithgow and with Aboriginal workers in Penrith and Lithgow confirmed the points stated above and in addition raised the following: • Communities have higher expectations of professionals in Aboriginal identified positions than of mainstream mental health workers. • There are insufficient Aboriginal workers in dedicated health and mental health positions – this puts a lot of pressure and strain on existing Aboriginal health workers. • The experience of Aboriginal workers is too often discounted when they do not have health or allied health qualifications. • Aboriginal health workers need to be accepted as integral members of clinical teams, with the importance of these positions to the Aboriginal communities recognized. • There is insufficient gender mix of Aboriginal health workers. • Community expect support from Aboriginal health workers which often does not fit the narrower and often inflexible expectations of the employer; i.e. workers are expected get involved in all sorts of issues which is outside their designated job description. This can create stress and tension in Aboriginal workers. • There is a need for more Aboriginal workers who can and act as cultural translators and support community members when accessing mainstream services. • Aboriginal workers need to know 'culture' to be effective in supporting their community. • There is a lack of cultural supervision and mentoring to support Aboriginal workers. • There is an ongoing need for cultural awareness and competency training for all non-Aboriginal health service providers to improve cultural safety for Aboriginal people accessing services. *Aboriginal community consultations Blue Mountains, Penrith, Hawkesbury, Lithgow September /October 2016*

Outcomes of the service needs analysis – Priority Theme: *Mental Health of Aboriginal People*		
		Yarn Up for Mental Health Consultation Report December 2015 (commissioned by Nepean Community & Neighbourhood Services and Partners in Recovery) *NBMLHD Aboriginal Health & Mental Health Worker consultations, October 2017*
Support for Aboriginal and Torres Strait Islander mental health	NBMPHN has newly allocated funds to enhance access to mental health services by Aboriginal and Torres Strait Islander people living in its catchment.	The only dedicated Aboriginal Medical Service (AMS) in proximity to the NBMPHN catchment is located in Mt Druitt. The NBMPHN is seeking activity data on usage of this service by Aboriginal and Torres Strait Islander people resident in the NBM catchment. The new tender arrangements (to commence in 2017) for the Mt Druitt AMS will in addition include a dedicated service based in Penrith which will facilitate easier access to culturally appropriate health services for at least part of the Aboriginal population within the region.
	Access to mainstream short term psychological therapy services for Aboriginal and Torres Strait Islander people in NBMPHN.	The number of ATAPS referrals into the Aboriginal and Torres Strait Islander people services in the NBMPHN in 2016-17 was 97 (27 per 100,000 population). This number does not include referrals for those whose GP practices outside the NBMPHN (3) who received a referral to the NBMPHN. The distribution of referrals for Aboriginal and Torres Strait Islander people services across the LGAs was: • Blue Mountains: 41 (53 per 100,000) • Hawkesbury: 13 (20 per 100,000) • Lithgow: 9 (43 per 100,000) • Penrith: 34 (17 per 100,000) Across the NBMHPN the average completed Aboriginal and Torres Strait Islander people sessions per referral in 2015-16 was 4.7. This is notably higher than the average number of completed Aboriginal and Torres Strait Islander people sessions per referral from the 2011-12 national data (3.2 sessions). It is also noteworthy that the 2015-16 NBMPHN proportion of Aboriginal and Torres Strait Islander people referrals out of total ATAPS referrals (4%) has increased from 2011-12 (2.2%) which at the time was higher than the 2011-12 national proportion (1.3%). NBMPHN data on ATAPS clients indicated there were 242 sessions (90 per 100,000 population) provided for Aboriginal and Torres Strait Islander people in 2016-17. Using

Outcomes of the service needs analysis – Priority Theme: *Mental Health of Aboriginal People*		
		the proportions of referrals by LGA, the estimated distribution of sessions across the LGAs is: • Blue Mountains: 102 sessions (133 per 100,000; 42.3% of NBMPHN) • Hawkesbury: 32 sessions (50 per 100,000; 13.4% of NBMPHN) • Lithgow: 23 sessions (107 per 100,000; 9.3% of NMBPHN) • Penrith: 85 sessions (43 per 100,000; 35.1% of NBMPHN) Aboriginal and Torres Strait Islander people sessions accounted for approximately 4.1% of all ATAPS sessions in 2016-17 in the NBMPHN. In comparison to 2015-16, where Aboriginal and Torres Strait Islander people sessions in NBMPHN accounted for 3.5% of all ATAPS referrals, the proportion of Aboriginal and Torres Strait Islander people sessions delivered in the NBMPHN has increased. *NBMPHN, ATAPS data, 2016-17* *Access to Applied Psychological Services (ATAPS) program. Nineteenth Interim Evaluation Report. Update on the achievements of Tier 1 and Tier 2 ATAPS, 2012, University of Melbourne, Melbourne* *Australian Bureau of Statistics, Estimated Aboriginal and Torres Strait Islander Resident Population by LGA, 2016* NBMPHN community consultations held across the NBM region indicated that the existing ATAPS Aboriginal and Torres Strait Islander people program needs better promotion of services, based on stronger engagement with elders and community members. *NBMPHN ATAPS Reform Community Consultations Report, 2017*

RURAL AND REMOTE AREAS AND OTHER UNDERSERVICED AND/OR HARD TO REACH POPULATIONS

Outcomes of the service needs analysis – Priority Theme: *Rural and Remote Areas and Other Underserviced and/or Hard to Reach Populations*		
Identified Need	Key Issue	Description of Evidence
Service Gaps For CALD Populations	Lack of targeted support for CALD populations across a range of mental health service needs.	A range of service support needs have been identified for CALD populations including suicide prevention, outreach services, and specialist services include post-natal support for depression. Further research and consultation is required to establish the main CALD groups of concern and options for enhancing existing services or providing additional services. The concerns raised by stakeholders include the following: • Lack of appropriate transcultural services in suicide prevention in all LGAs. • Lack of mental health outreach services for CALD people. • Lack of culturally appropriate psychiatric and psychological services. • Lack of CALD clinicians, e.g. counselling services in own language. • Lack of post-natal support/services for people suffering post-natal depression • Need to support people from CALD communities who remain isolated in their own homes and remain hesitant to access mental health services. • Stigma of mental illness and denial of mental health issues within some CALD communities hamper early intervention. • Lack of mental health literacy. • Unfamiliarity with health and mental health systems and lack of knowledge how to navigate system. • Reluctance to use medications by some CALD communities. • Services limited by criteria which do not meet need of CALD communities. *NBMPHN Mental Health Stakeholder Forum 23/2/16* *NBMPHN GP and AHP Consultations March 2016* *Stakeholder Consultation, NGO 11/3/16*

Outcomes of the service needs analysis – Priority Theme: *Rural and Remote Areas and Other Underserviced and/or Hard to Reach Populations*		
		Breaking Barriers Bringing Understanding (3BU) Project report, Nepean Migrant Access, 2016
Workforce Training And Capacity Development For CALD Populations	Need for enhanced workforce training to support special needs of CALD populations with mental illness.	A range of workforce issues have been identified for CALD populations. These include awareness of support services for CALD populations (translator services) and transcultural competency. Further research and consultation is required to establish the main CALD groups of concern and options for providing enhanced training and support to the workforce. The concerns raised in preliminary stakeholder consultation include the following: • More education is needed for clinicians in relation to the high number of psychosomatic disorders within the CALD community. • GP's need more education in working with CALD communities in relation to their mental health – lack of cultural understanding • Lack of training provided to GP's / Allied Health in using Telephone Translation Services. • Lack of public/service provider awareness of CALD mental health provision. • Lack of transcultural competency in workforce. • Lack of bi-lingual health/mental health clinicians • Education, information and mental health literacy for CALD community organisations on existing mental health services so they can support their communities adequately. *NBMPHN Mental Health Stakeholder Forum 23/2/16* *Stakeholder Consultation, NGO 11/3/16* *Breaking Barriers Bringing Understanding (3BU) Project report, Nepean Migrant Access, 2016*
Communication For CALD Populations	Inadequate communication for CALD populations regarding mental health service information and resources.	A range of communication issues have been identified for CALD populations. These include awareness of support services in relevant languages, mental health educational resources and the need for CALD specific directories of services. Further research and consultation is required to establish the main CALD groups of concern

Outcomes of the service needs analysis – Priority Theme: *Rural and Remote Areas and Other Underserviced and/or Hard to Reach Populations*		
		and options for providing improved communication and education to CALD communities. The concerns raised in preliminary stakeholder consultation include the following: • Lack of easy to access services outside the clinical setting • Lack of education in relation to stigma and discrimination with regards to mental health in CALD communities • Lack of awareness on how to navigate the mental health system and what supports are available • Lack of local mental health related resources in different languages. *Stakeholder Consultation, NGO 11/3/16* *Breaking Barriers Bringing Understanding (3BU) Project report, Nepean Migrant Access, 2016*
Homelessness And Mental Health	Inadequate referral pathways between clinical and social support services for mental health patients with housing and accommodation problems.	The problems confronting many people with mental illness in relation to housing and accommodation are well known and have been the subject of various government initiated reviews and evaluations. The recent changes to NSW government housing support (HASI packages) have provided additional options to people with mental illness. However concerns continue to be raised by NBM stakeholders regarding the difficulties encountered by people with mental illness in relation to housing. These concerns include the inadequacy of the number of HASI packages and the criteria for eligibility. Further research and consultation is required to establish the key issues concerning people with mental illness in the NBM region. Stakeholders raised the following issues with regard to housing in preliminary consultations: • Lack of mental health skills amongst homelessness assertive outreach workers.

Outcomes of the service needs analysis – Priority Theme: *Rural and Remote Areas and Other Underserviced and/or Hard to Reach Populations*		
		• Lack of referral pathways between clinical and non-clinical mental health service providers for people who are homeless. *Stakeholder Consultation, NGO 15/2/16* *Evaluation of Housing and Accommodation Support Initiative (HASI). UNSW, 2012*
Service Needs For Prisoners On Release	Prisoners transitioning to the community have higher than average incidence of mental health and D&A problems, typically have complex needs, and require access and strong links to a broad range of services.	In a 2012 study, 29% of NSW prisoners surveyed reported high or very high psychological distress on release from prison. 41% of NSW prisoners reported that in the past they have been told (by a doctor, psychiatrist, psychologist or nurse) that they have a mental health disorder. Correctional services stakeholders from the NBM region have indicated that the mental health needs of former inmates are not currently being met in a substantive or systematic way post-release. The NBMPHN Clinical Council and NBMLHD Aboriginal Health workers have additionally raised there is currently a lack of and poor-quality of aftercare for persons newly released from prison, in particular in the Lithgow LGA. Further research is required to identify usual referral pathways, services available and utilisation of services by former inmates in the region. *Australian Institute of Health and Welfare 2013. The health of Australia's prisoners 2012. Cat. no. PHE 170. Canberra: AIHW.* *Consultations with Correctional Services Stakeholders. (2015/16)* *NBMPHN Clinical Council Consultation 2/11/ 2016* *NBMLHD Aboriginal Liaison Officer and Mental Health Clinician / Aboriginal Health Coordinator consultation, 31/10/17*
Regional Variation In The Provision Of Services	Inadequate mental health services in outer LGAs of NBM region: Lithgow and Hawkesbury LGAs.	Stakeholders have indicated concerns specific to the outer areas of the NBM region, Lithgow and Hawkesbury LGAs. A wide range of issues have been identified. Further research is required to identify referral pathways and service mapping of the type of

Outcomes of the service needs analysis – Priority Theme: *Rural and Remote Areas and Other Underserviced and/or Hard to Reach Populations*		
		services currently available to people with mental illness in these LGAs, and the potential impact of any lack of service provision. In preliminary consultations stakeholders have raised the following issues: • Insufficient skills by private clinicians to treat consumers with moderate to severe mental illness in the Hawkesbury area. • Minimal mental health support in Hawkesbury – Nepean hospital is main MH inpatient unit which often has bed block. • Social isolation in outer regional areas particularly Lithgow and Hawkesbury LGAs. • Limited availability/location of mental health clinical services in Lithgow – Katoomba hospital is the closest MH inpatient unit for MH patients from Lithgow. *NBMPHN GP and AHP Consultations March 2016* *NBMPHN Mental Health Stakeholder Forum 23/2/16* *NBMML and NBMLHD Community Reports 2013-Hawkesbury and Lithgow* *NBMLHD Aboriginal Liaison Officer and Mental Health Clinician / Aboriginal Health Coordinator consultation, 31/10/17*
Adequacy Of Supported Accommodation Available For Young People With A Mental Illness	Supported accommodation available for young people with a mental health illness are inadequate and or not fit for purpose	In consultations, stakeholders have raised the following issues: • Inadequacy of housing available, in particular for young people with a mental health illness. • Limited places available in care facilities that cater for people with a mental illness and which are age-appropriate for young people. • Care facilities are poorly equipped to provide appropriate support for people with a mental illness • Lack of safe and secure care facilities available for people with a mental illness *NBMLHD Aboriginal Liaison Officer and Mental Health Clinician / Aboriginal Health Coordinator consultation, 31/10/17*

Outcomes of the service needs analysis – Priority Theme: *Rural and Remote Areas and Other Underserviced and/or Hard to Reach Populations*		
Services To LGBTI People	Inadequate support for LGBTI people with mental illness.	Preliminary consultations indicate that LGBTI people living in the NBM region may not be receiving adequate support for mental illness. *NBMPHN GP and AHP Consultations March 2016*
Short Term Focused Psychological Interventions	Negative trends can be identified in the uptake of ATAPS services in the NBM region.	The number of services per patient under ATAPS has been consistently higher in the NBM region than the national average (e.g. 5.9 NBM vs 4.7 national in 2015/16). ATAPS has grown at a slower rate in the NBM region compared to nationally. Over the 4 years to 30/6/16 patient numbers increased on average by 5.7% p.a. in the NBM region, compared to 12.7% p.a. nationally, and number of services provided increased by 12.7% p.a. in the NBM region compared with 14.6% p.a. nationally. Less than one-third of ATAPS patients in the NBM region have been male and less than one-third of services have been provided to males. In 2016/17, overall ATAPS services continued to be utilized to capacity within the available funding and there was no possibility to increase the referral rate. ATAPS services are an important part of mental health service provision in primary care across the region. *ATAPS Tables 2011-2016 by PHN, Department of Health, 2017* *http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-Mental_Health_Data*
	Access to mental health short term therapy services through ATAPS is provided across the NBMPHN.	ATAPS usage activity are a general indicator of access to clinical services by people with mild to moderate mental illness. The figures for other cohorts should be looked at in this context to inform observations about relative rates of access.

Outcomes of the service needs analysis – Priority Theme: *Rural and Remote Areas and Other Underserviced and/or Hard to Reach Populations*		
		The number of referrals to ATAPS General (for people on low income not otherwise able to access psychological therapy services) in the NBMPHN in 2016-17 was 1,674 (467 per 100,000 population). This number does not include referrals for those whose GP resided outside the NBMPHN (23) who received a referral to the NBMPHN. The distribution of general ATAPS referrals across the LGAs was: • Blue Mountains: 897 (1,166 per 100,000) • Hawkesbury: 86 (133 per 100,000) • Lithgow: 23 (109 per 100,000) • Penrith: 668 (341 per 100,000) The proportion of NBMPHN ATAPS General referrals out of total ATAPS referrals remained similar in 2016-17 (70.1%) in comparison to 2015-16 (69.2%). Across the NBMHPN in 2015-16 the average completed ATAPS General sessions per referral was 5.01. This is notably higher than the average number of completed ATAPS General sessions per referral from the 2011-12 national data (3.5 sessions). NBMPHN data on ATAPS clients indicated there were 6,437 (1,794 per 100,000 population) sessions provided for ATAPS General in 2016-17. Using the proportions of referrals by LGA, the estimated distribution of sessions across the LGAs is: • Blue Mountains: 3,450 sessions (4,486 per 100,000; 53.6% of NBMPHN) • Hawkesbury: 328 sessions (508 per 100,000; 5.1% of NBMPHN) • Lithgow: 90 sessions (427 per 100,000; 1.4% of NMBPHN) • Penrith: 2,568 sessions (1,310 per 100,000; 39.9% of NBMPHN) ATAPS General sessions accounted for approximately 60.1% of all ATAPS sessions in 2016-17 in the NBMPHN. This was similar in comparison to 2015-16 (58.9%). *NBMPHN, ATAPS data, 2016-17* *Fletcher, J; King, K; Bassilios, B; Reifels, L; Blashki, G; Burgess, P; Prikis, J, Evaluating the Access to Applied Psychological Services (ATAPS) program. Nineteenth Interim*

Outcomes of the service needs analysis – Priority Theme: *Rural and Remote Areas and Other Underserviced and/or Hard to Reach Populations*		
		Evaluation Report. Update on the achievements of Tier 1 and Tier 2 ATAPS, 2012, University of Melbourne, Melbourne *Estimated Resident Population by LGA, Australian Bureau of Statistics, 2016*
	ATAPS services for perinatal depression may vary across the NBMPHN. The proportion of total ATAPS services delivered for perinatal depression in the NBMPHN is comparatively small.	The number of ATAPS referrals for perinatal depression services in the NBMPHN in 2016-17 was 76 (21 per 100,000 population). This number does not include referrals for those whose GP resided outside the NBMPHN (1) who received a referral to the NBMPHN. The distribution of referrals for perinatal depression services across the LGAs was: • Blue Mountains: 47 (61 per 100,000) • Hawkesbury: 4 (6 per 100,000) • Lithgow: 0 (0 per 100,000) • Penrith: 25 (13 per 100,000) Across the NBMHPN in 2015-16 the average completed perinatal depression sessions per referral was 4.98. This is notably higher than the average number of completed perinatal depression sessions per referral from the 2011-12 national data (3.6 sessions). However, the proportion of perinatal depression referrals out of total ATAPS referrals was lower in the NBMPHN (4% of all referrals) than the 2011-12 national proportion (5.4%). NBMPHN data on ATAPS clients indicated there were 257 sessions (72 per 100,000 population) provided for perinatal depression in 2016-17. Using the proportions of referrals by LGA, the estimated distribution of sessions across the LGAs is: • Blue Mountains: 159 sessions (207 per 100,000; 61.8% of NBMPHN) • Hawkesbury: 14 sessions (21 per 100,000; 5.3% of NBMPHN) • Lithgow: 0 sessions (0 per 100,000; 0% of NMBPHN) • Penrith: 85 sessions (43 per 100,000; 32.9% of NBMPHN) Perinatal depression sessions accounted for approximately 2.4% of all ATAPS sessions in 2016-17 in the NBMPHN. In comparison to 2011-12 national figures,

Outcomes of the service needs analysis – Priority Theme: *Rural and Remote Areas and Other Underserviced and/or Hard to Reach Populations*		
		where perinatal depression sessions accounted for 5.5% of total ATAPS sessions, the proportion of perinatal depression sessions delivered in the NBMPHN was smaller. *NBMPHN, ATAPS data, 2016-17* *2015-16 Fletcher, J; King, K; Bassilios, B; Reifels, L; Blashki, G; Burgess, P; Prikis, J, Evaluating the Access to Applied Psychological Services (ATAPS) program. Nineteenth Interim Evaluation Report. Update on the achievements of Tier 1 and Tier 2 ATAPS, 2012, University of Melbourne, Melbourne* *Estimated Resident Population by LGA, Australian Bureau of Statistics, 2016*
	Key issues influencing access to short term psychosocial therapy services	Recent community and service provider consultations held across the NBM region highlighted a number of issues and concerns regarding limitations with the existing ATAPS program and suggestions how to address these within the PHN's mental health reform tasks to create a stepped care model of primary mental health care services across their regions. The following key issues and concerns were raised about the existing ATAPS program delivery in the NBM region: • Out of pocket costs and low rates of bulk-billing services are a deterrent for many people in accessing psychological services under MBS Better Access. • Need to encourage more bulk-billing under Better Access to support people on low income. • Fee for service arrangements are not the best fit for people with complex mental illness. • Need to extend annual session number limit beyond 12 sessions for people with moderate to severe mental illness with added complexities who can benefit from psychological therapy – suggestion to provide a specially segmented psychological therapy service for this group through providers with specialist skills. • Need for more group therapy options as an alternative to individual psychological therapy sessions.

Outcomes of the service needs analysis – Priority Theme: *Rural and Remote Areas and Other Underserviced and/or Hard to Reach Populations*		
		• Need to extend access to additional underserviced or hard to reach groups e.g. people from culturally and linguistically diverse backgrounds; people identifying as LGBTI; people newly released from prison; older people; people with chronic pain and co-morbidities; at risk of or homeless people; people in residential aged care facilities; people with eating disorders; people with dual diagnosis (mental health and AOD) • Need to provide options for GPs to receive clinical triage and assessment support and a system of reliable feedback from providers to facilitate monitoring. • Importance of effectively supporting consumers in the transition to any new service arrangements, and of providing some level of continuity of care to existing ATAPS clients. • Importance of managing costs to clients: any changes to the ATAPS program should avoid any new and unnecessary disincentives to pursue mental health care such as new additional costs. • Interest in pursuing low intensity mental health models (including group work program) and other models such as drop-in centres, as part of the new stepped care approach, designed to provide shorter and quicker interventions for people with less complex mental health issues. • Need for consideration of non-fee for service based models for engaging psychologists to meet the needs of key underserviced groups. • Need for special referral pathways for post-prison clients who need fundamental issues addressed first, such as housing, social stability and employment. • Telephone psychiatry support for GPs. • Local differences in each LGA need to be factored into any changes to service provision. *Nepean Blue Mountains PHN ATAPS Reform Community Consultations, July & August 2017*

Outcomes of the service needs analysis – Priority Theme: *Rural and Remote Areas and Other Underserviced and/or Hard to Reach Populations*		
	Need for perinatal therapy services in Cranebrook	A dedicated ante natal clinic has been established by the LHD in Cranebrook. There is a need for a part time co-located psychological therapy service to support women with perinatal depression and related mental health issues. *Communicated by LHD manager Ante natal services (via GP Liaison nurse) November 2016*

CHILDREN & YOUTH

Outcomes of the service needs analysis – Priority Theme: *Children & Youth*		
Identified Need	Key Issue	Description of Evidence
Gaps In Services For Children And Youth	Inadequate paediatric and adolescent service provision in psychiatry and mental health.	A wide range of shortcomings have been identified for services currently available to children and youth through preliminary consultations. The importance of providing paediatric and adolescent services across all types of health services is well understood. There are indications that the apparent increase in mental illness amongst children and adolescent over recent decades has not been met in the NBM region by increasing the range and number of services targeting this population. Further research is required to identify the range of service needs in the NBM region as well as mapping of services currently provided. Stakeholders have raised the following concerns in regard to gaps in services for this population: • Lack of early intervention mental health and D&A programs for under 16 year olds. • Lack of psychiatric services for children and young people. • Lack of After Hours service for ages 12 to 24. • Lack of general intervention programs for children under 12 to support complex needs. • Difficulty in finding services for 18-25 year olds, and no provision for people under 18 to be admitted to Nepean Hospital Mental Health Unit. *NBMPHN GP and AHP Consultations March 2016* *NBMPHN Mental Health Stakeholder Forum 23/2/16* *Stakeholder Consultation, NGO 8/3/16*

Outcomes of the service needs analysis – Priority Theme: *Children & Youth*		
Regional Variation In Provision Of Services	The perceived lack of service provision for children and youth may be aggravated in some LGAs and postcodes where there are higher proportions of young people.	Stakeholders have identified the potential for poorer service availability in locations where there are higher proportions of young people. Further research is required to map service provision in these regions and compare it with the distribution of youth populations. The concerns raised by stakeholders included the following: • Lack of mental health services in the Upper Mountains, Lithgow and Hawkesbury. • Lack of outreach services across all 4 LGAs. • Lack of tertiary mental health unit for children and youth in the region. • Lack of GP's who can take children/youth, especially in Cranebrook. • Lack of Headspace services in Lithgow, Blue Mountains and Hawkesbury. *Stakeholder Consultation, NGO 8/3/16* *NBMPHN Mental Health Stakeholder Forum 23/2/16* *NBMPHN GP and AHP Consultations March 2016*
Services For Vulnerable Groups Within Young Populations	The overall perceived lack of services for young people in the region appears to be aggravated for young people in vulnerable groups.	Stakeholders have indicated that children and young people who are especially vulnerable have unmet service needs. Further research is required as part of broader mapping of services to children and young people. Stakeholders raised the following concerns: • Lack of service provision for children high on the Autism Spectrum. • Lack of support for young people identifying as LGBTI. • Lack of Aboriginal and CALD youth/child mental health services. • Lack of service provision for young mothers with children who are experiencing symptoms of anxiety and depression, and antenatal services for young mothers with perinatal depression. • Lack of appropriate support for homeless youth.

Outcomes of the service needs analysis – Priority Theme: *Children & Youth*		
		• Need for better connection for young people in and out of Home Care, Juvenile Justice, FACS, Health and NGOs, through sharing data and information to support integrated care. *NBMPHN Mental Health Stakeholder Forum 23/2/16* *Stakeholder Consultation, NGO 8/3/16* *NBMPHN GP and AHP Consultations March 2016* *NBMPHN Clinical Council Consultation 2/11/ 2016*
Headspace Services Within Region	There is one headspace centre in the region which is located in Penrith.	headspace Penrith has been in operation since May 2013 to deliver services addressing mental health, physical and sexual health, drug and alcohol and vocational issues for young people aged 12-25 years in the region. Since 2014 headspace Penrith also operates a headspace Youth Early Psychosis Program as a spoke of the western Sydney hub and spoke model (hub in Mt Druitt and another spoke in Parramatta). Concerns have been raised that headspace is not well integrated with GPs and that GPs do not always receive feedback when they have made a referral. *NBMPHN Clinical Council Consultation 2/11/ 2016*
	Geographic access to headspace services for youth is localized; the Penrith centre is mainly used by youth who live in the Penrith area, close to the headspace location.	In 2015/16 financial year, 66% of all clients of the Penrith headspace center resided in the Penrith LGA. 19% of clients resided in the Blue Mountains LGA. 8% of clients resided in the Hawkesbury LGA. No clients resided in the Lithgow LGA. A small proportion of clients (7%) resided outside the region. *headspace Penrith centre activity data 2015/16* In theory headspace Penrith is open to any young person regardless where they live. However, distance and transport issues prevent most young people from accessing headspace unless they live in the Penrith LGA or lower Blue

Outcomes of the service needs analysis – Priority Theme: *Children & Youth*		
		Mountains. The lack of and need for headspace type services in Lithgow, upper Blue Mountains and Hawkesbury has been raised at various stakeholder consultations. *NBMPHN Mental Health Stakeholder Forum 23/2/16* *NBMPHN GP and AHP Consultations March 2016* *NBMPHN Clinical Council Consultation November 2016*
	Headspace referral sources	The proportion of headspace Penrith centre users who were formally referred, or had received a written referral to headspace in 2016/17 was 20.4%. This was lower than the national average at 42.3%. No referral was received for 47.0% of young people (YP) with a further 32.6% of referral sources unknown. Of those received, the source of written referrals among Penrith headspace centre in 2016/17 users was similar to national averages of headspace centre users, as follows: • Primary health care – GP: 70.7% of YP (79.5% national average) • School-based service - school psychologist, guidance or welfare worker: 10.8% of YP (6.5% national average) • Community service / welfare agency: 5.9% of YP (4.1% national average) • Community-based mental health service (e.g. CAMHS, AMHS): 4.5% of YP (3.2% national average) • Other service: 2.7% of YP (2.5% national average) • Specialist health care - psychiatrist / paediatrician / inpatient service: 1.4% of YP (1.4% national average) • Legal, justice, corrections service or mandated: 2.3% of YP (1.6% national average) • Employment agency: 1.4% of YP (0.7% national average) • Eheadspace: 0.5% of YP (0.4% national average)

Outcomes of the service needs analysis – Priority Theme: *Children & Youth*		
		• Community-based allied health professional: 0% of YP (0% national average) The proportion of referrals 'out' for future care among Penrith headspace centre users was quite different to national averages. In 2016/17, 13.4% of headspace Penrith users, compared to 9.3% of headspace clients nationally were referred to other services in conjunction with or at the end of their treatment. Of these, more Penrith users (38.8%) were referred to specialist health care, compared to a national average of 24.2%. The major points of 'referral out' for the Penrith service are summarised below: • Community-based mental health service: 31.6% of YP (35.8% national average) • Specialist health care (Psychiatrist / Paediatrician / inpatient): 38.8% of YP (24.2% national average) • Community service / welfare agency: 9.7% of YP (13.8% national average) • Community-based allied health professional: 11.7% of YP (10.2% national average) • Primary health care – GP: 2.0% of YP (5.6% national average) • Alcohol or other drug service: 0.5% of YP (2.6% national average) • Employment agency: 3.6% of YP (4.9% national average) • School based service: 1.0% of YP (2.1% national average) • Legal, justice, corrections service: 1.0% of YP (0.8% national average) *headspace Penrith Centre Activity Overview Report. Financial Year 2016/17 (1 July 2016 to 30 June 2017)*

Outcomes of the service needs analysis – Priority Theme: *Children & Youth*		
	Average wait times to access headspace services at the Penrith centre are similar to national averages.	Self-reported wait times to attend the first appointment ranged from less than 3 days to more than 4 weeks. Most commonly, 35.3% of cases of young people reported they waited between 1-2 weeks to attend their first appointment at the Penrith centre. This is similar to the national average, where 34.4% of young people waited 1-2 weeks to attend their first appointment. A further 28.0% of Penrith headspace clients reported they waited less than 3 days for their first appointment. *headspace Penrith Centre Activity Overview Report. Financial Year 2016/17 (1 July 2016 to 30 June 2017)*
	Proportion of ATAPS services provided to children (0-11 years)	The number of ATAPS referrals for child mental health services in the NBMPHN in 2016-17 was 234 (65 per 100,000 population). This number does not include referrals from a Paediatrician (21) or for those children with a GP residing outside the NBMPHN (17) who received a referral to the NBMPHN. The distribution of these referrals for child mental health services across the LGAs was: • Blue Mountains: 91 (118 per 100,000) • Hawkesbury: 20 (31 per 100,000) • Lithgow: 6 (28 per 100,000) • Penrith: 117 (65 per 100,000) Across the NBMHPN in 2015-16 the average completed child mental health sessions per referral was 5.2. This is notably higher than the average number of completed child mental health sessions per referral from the 2011-12 national data (3.8 sessions). The proportion of child mental health referrals out of total ATAPS referrals in 2016-17 was 9.8%, a decrease from 13.7% of all ATAPS referrals in 2015-16.

Outcomes of the service needs analysis – Priority Theme: *Children & Youth*		
		NBMPHN data on ATAPS clients indicated there were 1,148 sessions (320 per 100,000 population) provided for child mental health services in 2016-17. Using the proportions of referrals by LGA, the estimated distribution of sessions across the LGAs is: • Blue Mountains: 446 sessions (581 per 100,000; 39% of NBMPHN) • Hawkesbury: 98 sessions (152 per 100,000; 9% of NBMPHN) • Lithgow: 29 sessions (140 per 100,000; 3% of NMBPHN) • Penrith: 574 sessions (293 per 100,000; 50% of NBMPHN) Child mental health sessions accounted for approximately 10.7% of all ATAPS sessions in 2016-17 in the NBMPHN was similar to 2015-16 (11.6%). *NBMPHN, ATAPS data, 2016-17* *Estimated Resident Population by LGA, Australian Bureau of Statistics, 2016*

LOW INTENSITY

Outcomes of the service needs analysis – Priority Theme: Low Intensity		
Identified Need	Key Issue	Description of Evidence
Community Wide Communication To Support People At Risk Of Mental Illness	Enhanced and targeted communication methods are required to engage and inform the general population about the risks of mental illness and available supports.	Stakeholders previously raised the following concerns regarding community wide engagement and education concerning mental health, risks and wellbeing: • Need for resources and education that promote mental wellbeing. • Lack of service navigation website or tool to find appropriate services and interventions across the stepped care model. • Lack of guidance available to access appropriate, evidence-based digital interventions. • Need for support to use e-health interventions in the home. • Need for early intervention and access to low intensity services for high school and university students to start intervention before there is significant illness. The Commonwealth Department of Health launched *'Head to Health' the* new digital mental health gateway for low intensity mental health services in October 2017. Some of the stakeholder concerns regarding lack of a service navigation tool have been addressed through the development and launch of *'Mental Health Help'* a new regional Mental Health Navigation Tool. *NBMLHD Mental Health & Suicide Prevention Focus Group 2/3/16* *NBMPHN Mental Health Stakeholder Forum 23/2/16* *NBMPHN Clinical Council Consultation 2/11/ 2016* *https://headtohealth.gov.au/* *http://www.mentalhealthhelp.com.au/*

Outcomes of the service needs analysis – Priority Theme: Low Intensity		

Services To Support People With Low Intensity Mental Health Needs	Local 'bricks and mortar' services are available but they are not 'joined up' into a network and awareness of their capacity amongst GPs and other relevant service providers (e.g. emergency departments) is limited	There is a broad range of services available within the NBMPHN catchment that include a counselling and support services. These comprise:
		• Community health centers
		  ○ Penrith - *5 (St Clair, St Mary's, Penrith, Cranebrook, Lemongrove)
		  ○ Blue Mountains – *3 (Katoomba, Lawson, Springwood)
		  ○ Lithgow - *2 (Lithgow, outreach service [to Portland, Tablulam and Wallerawang])
		  ○ Hawkesbury - *1 (community health services are available at Hawkesbury Hospital)
		• Neighborhood centers
		  ○ Penrith - *14 (Nepean Community and Neighbourhood Services (5), Community Junction (8), St Marys Area Community Development Project (1))
		  ○ Blue Mountains – *5 (Blaxland, Springwood, Winmalee, Lawson, Katoomba)
		  ○ Lithgow - *1
		  ○ Hawkesbury - *1 (Richmond)
		• Private psychologists and clinical social workers
		• Chaplains
		NBMLHD Healthcare Service Plan 2012-2022

	On-line services to support people with low intensity mental health needs are increasingly available; details on awareness and use of these services needs exploration.	There is a high awareness of Lifeline but this is focused on supporting people in crisis. There is a need to promote e-mental health services to stakeholders. It is expected that Australia's new national digital mental health gateway 'Head to Health' will facilitate access to digital mental health services as well as complementary face-to-face therapies.

Outcomes of the service needs analysis – Priority Theme: Low Intensity		
		It will be important to create awareness of locally based 'bricks and mortar' services when promoting the new Commonwealth digital gateway. *https://headtohealth.gov.au/*
	Coaching services	There is a need to facilitate access to coaching services to increase the variety of services within the mental health stepped care model.